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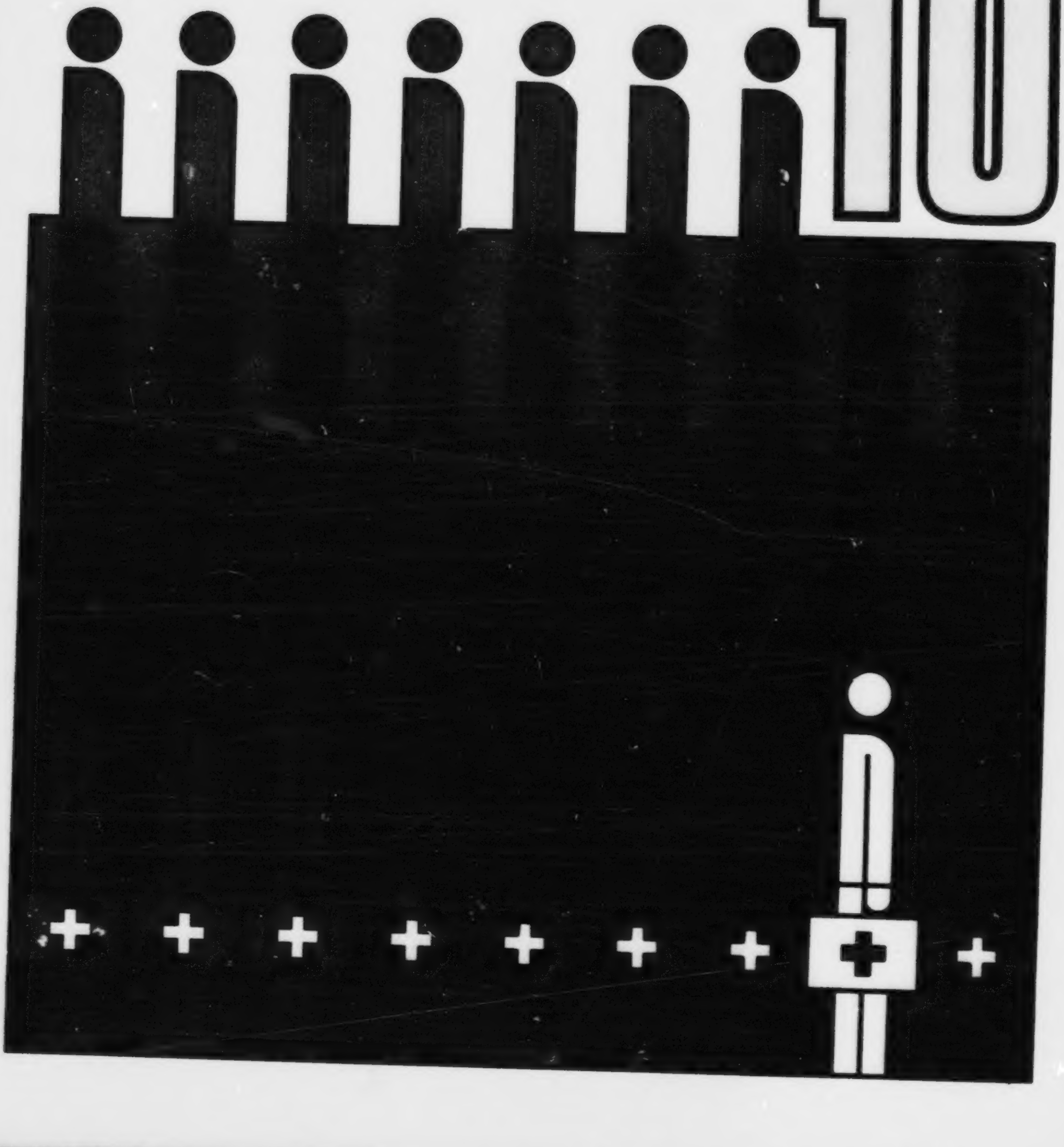
SALUS: LOW-COST RURAL HEALTH CARE AND HEALTH MANPOWER TRAINING

an annotated bibliography with special emphasis on developing countries

Editor: ROSANNA M. BECHTEL

VOLUME 10



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An annotated bibliography with special emphasis on developing countries

Volume 10

Editor: Rosanna M. Bechtel

Abstracts written by: Rosanna M. Bechtel, Elisabeth Bollinger, Hope Cadieux-Ledoux, Anita Firth, Frances Morgan, and David Paul-Elias

(This is the tenth in a series of annotated bibliographies on low-cost rural health care and health manpower training. These volumes are published irregularly.)

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Preface

IDRC is pleased to announce that negotiations are under way to establish a SALUS microfiche depository at the Biblioteca Regional de Medicina in São Paulo, Brazil. Readers in Latin America will soon be able to write to BIREME for microfiches of the documents included in SALUS as well as to the Centro de Documentação, Ministério de Saude, Esplanada des Ministérios, Bloco G, 70058 Brasilia DF, Brasil. Readers in Indonesia are respectfully asked to note the following change in the address for Atma Jaya:

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Long-time readers of the SALUS bibliographies will be happy to know that following directly in the wake of this volume will be a cumulative index to the first 10 volumes.

Volume 10 of SALUS marks the departure of two long-time staff members. Mrs Anita Firth, who retired after 7 years as SALUS assistant, will be greatly missed. This position is now held by Mrs Dianne Kalbfleisch, whom I would like to thank for her help in preparing this volume.

The second SALUS "graduate" is Ms Hope Cadieux-Ledoux. After 8 years and 10 bibliographies, she closes her SALUS career with the introduction to this volume, in which she traces some of the trends in developing country health care that have been reflected in the literature of the past decade. I would like to thank Hope for her extensive contribution to SALUS and the other abstractors as well for their assistance in the preparation of this volume.

Rosanna M. Bechtel
SALUS Manager
Information Sciences Division
International Development Research Centre

Introduction

When the SALUS bibliography began 8 years and 10 volumes ago, the world looked to the Chinese experience for a solution to the problem of bringing health care to the rural poor. By mobilizing mass support for public health campaigns, utilizing a combination of modern and traditional medicine, and training legions of barefoot doctors to bring basic health care to the countryside, China had succeeded in largely eradicating communicable diseases in what had formerly been called the "sick man of Asia."

Since then, almost all developing countries have experimented with the idea of providing basic, integrated care through barefoot doctors of one form or another. These have ranged from the village health volunteer with 3 weeks training and who is in charge of the village pharmacy to the salaried medical assistant with 2 – 4 years of postsecondary education and who heads the health team in a rural health centre or hospital. Although isolated examples of successful programs are legion, they have all too often consisted of pilot projects in demonstration zones that founder when external funding is withdrawn or are dependent upon the efforts of a particularly dynamic individual. Nowhere have they been applied on a national scale and a sustained basis with the impact of the original program.

Could it be that the Chinese model — inspired by a particular political philosophy and imbued with revolutionary idealism — is not replicable elsewhere? If so, why have other models of appropriate solutions not been forthcoming? One reason, of course, is that most developing countries have a hospital-based health care delivery system already in place, whose operating costs, aggravated by rising prices and inflation, demand a larger share of the health budget with each passing year. Countries may talk of building so many health centres or training so many auxiliaries, but all too often these items are low priority when it comes to the allocation of funds.

Another reason for the lack of appropriate solutions is that the health pyramid is a more complex structure than it appears to be. The deployment of auxiliaries presupposes the support of a two-way referral system. Auxiliaries depend on more highly trained personnel for supervision, continuing education, and management of conditions beyond their level of competence. Similarly, auxiliaries must have a reliable form of transportation at their disposal for taking patients to a secondary facility, performing outreach activities, and replenishing essential drugs and supplies. If even one of these elements is missing, e.g., a steady supply of drugs, the system breaks down, the auxiliaries' morale suffers, and patients turn elsewhere for medical attention, usually to traditional healers or quacks. Indeed, the health pyramid has been described as "administrative intensive" because it requires a level of logistic sophistication that most developing countries cannot provide.

Thus, the training of health auxiliaries is still a priority in most developing countries and the conditions that allow their successful deployment have, of late, become the object of considerable attention. WHO has undertaken a number of workshops, seminars, and training courses aimed at strengthening the administrative capability of health planners, hospital administrators, and other key personnel in the health sector. At the same time, the concept of primary health care being promoted by WHO in its thrust toward health for all by the year 2000 consists of a streamlined, pared package of basic health interventions. For example, nowhere is the attention to infrastructure more evident than in the WHO Expanded Programme on Immunization and the concept of the "cold chain." The "cold chain" addresses the problem of transporting potent vaccines from manufacturer to child. Each step involved in the process is considered and provided for, even to the point of developing new technologies for facilitating the process.

Recently, a great deal of interest has been shown in two health interventions that are relatively simple and inexpensive to implement but have great potential in terms of saving lives. In countries where malnutrition is widespread and infectious disease rampant, young children are particularly vulnerable to measles, which results in many deaths every year. This disease can be prevented by means of one dose of vaccine — provided, of course, that the "cold chain" has been maintained.

The second intervention is the oral rehydration of young children with diarrhea. Oral rehydration has been shown to be just as effective as intravenous rehydration in hospital and clinic settings and the process has been simplified to the point that it can be applied by mothers and even, possibly, older siblings of dehydrated children. Indeed, some countries are now producing prepackaged oral rehydration preparations that require only the addition of a specified amount of water. The packets can be labeled in such a way as to make the directions comprehensible to illiterate mothers.

Admittedly, prevention of diarrhea would be preferable to a cure for dehydration but the logistic problems and expense involved in building clean water and waste disposal systems, at least in rural areas, makes their provision unlikely for the immediate future. In the meantime, oral rehydration is within the power of the nonmedical person; offers tangible, immediate results; and may give individuals a greater sense of control over their own lives and the lives of their children.

Perhaps the most innovative idea to have surfaced in the realm of health services delivery in a long time is the child-to-child concept introduced by David Morley. Briefly, the program and publication of the same name aim to interest and educate older children in the care of their younger brothers and sisters, for whom they may already be responsible a great deal of the time. The content of the program might cover such topics as nutrition, child development, the importance of immunization, the infant's need for stimulation, accident prevention in the home, and even simple first aid and health interventions (such as oral rehydration). If such a program were to be integrated within the school curriculum and reinforced and expanded with each passing year, it might be possible to make every schoolchild a health promoter.

The causes of ill health in the world cannot be disassociated from the causes of poverty and, as such, cannot be expected to be cured by action in one sector alone. The wide-eyed innocence and unbridled enthusiasm for the perfect solution to the problem of rural health care delivery (i.e., the Chinese model) are not as evident in the literature of today as they were in the literature of 8 years ago; rather, they have given way to a greater understanding of the complexity of the problem and a more humble, cautious approach toward its solution. Measles prevention, oral rehydration, and child health workers, admittedly, do not get to the heart of the problem but at least they offer a realistic alternative to the impotence and fatalism that parents must feel in the face of child mortality. In addition, they will allow some children to survive who would otherwise have died, hopefully to be met halfway by more fundamental health and social measures — perhaps in more prosperous times or perhaps even by the year 2000.

Hope Cadieux-Ledoux

Abbreviations and Acronyms

AID — Agency for International Development
BCG — Bacillus Calmette-Guerin
c — centimetre(s)
cc — cubic centimetre(s)
d — day
DPT (DTP) — diphtheria-pertussis-tetanus
Engl — English
FAO — Food and Agriculture Organization
Fren — French
g — gram(s)
Ital — Italian
IUD — intrauterine device
kcal — kilocalorie(s)
kg — kilogram(s)
km — kilometre(s)
mg — milligram(s)
ml — millilitre(s)
Russ — Russian
Span — Spanish
UK — United Kingdom
UN — United Nations
UNICEF — United Nations Children's Fund
US (USA) — United States of America
USSR — Union of Soviet Socialist Republics
WHO — World Health Organization

I Reference Works

6301 **Brasil, Ministério da Saúde.** *Informação para a saúde. (Health information).* Brasilia, Ministério da Saúde, Centro de Documentação. Portuguese.

This monthly information bulletin from Brazil's ministry of health contains summaries of health-related government directives, conference reports, and a bibliography, partly annotated, of documents received by the library of the documentation centre. The main topics of interest are health planning and administration, health services delivery, epidemiology, disease prevention and control, health education, maternal child health, etc. Readers are invited to request photocopies of these documents from the library. (RMB)

6302 **Commonwealth Secretariat, London.** *Health training; a directory of Commonwealth resources.* London, Commonwealth Secretariat, 1979. 298p. Engl.

This directory, compiled following the 5th Commonwealth Medical Conference held in New Zealand in November 1977, lists alphabetically the training resources and facilities available in 50 Commonwealth countries. Each country section consists of: a summary of existing primary health care in that country; an alphabetical list of institutions providing health care training in that country, a summary of their facilities, and the nature and length of the courses provided; starting dates of courses; language(s) of instruction; admissions policy regarding students from other countries; etc. An index to the subjects of the study is included in the appendices. (AF)

6303 **Elling, R.H. ed(s).** *Cross-national study of health systems: countries, world regions, and special problems; a guide to information sources.* Detroit, Mich., Gale Research, Health Affairs Information Guide Series Vol. 3, 1980. 687p. Engl. Refs.

This annotated bibliography contains references on special health-related problems ranging from auxiliary health workers to traditional medicine, on countries whose health care systems are well documented (Canada, Cuba, the People's Republic of China, Sweden, the UK, and the USSR), and on these areas of the world: Africa, the Eastern Mediterranean, Europe, Southeast Asia, and the Western Pacific. Each entry lists author or corporate author, title, and source and most include abstracts. The entries are arranged alphabetically in each chapter. There are a subject index and a combined author and title index as well as a list of abbreviations used. (RMB)

6304 **Martin, J.** *Bibliographie sommaire sur les soins de santé primaires et la promotion de la santé par l'éducation et la participation. (Brief bibliography on primary health care and health promotion through education and participation).* Sozial- und Präventivmedizin (Zurich, Switzerland), 24(2-3), May 1979, 178-179. Fren.

Sixty references to publications on primary health care, health education, and self-help are listed in alphabetical order by author in the language of the original. No abstracts are included. (HC-L)

6305 **Population Center Foundation, Manila.** *Population data information service: catalogue of research abstracts.* Manila, Population Center Foundation, Population Information Division. Engl.

The Population Data Information Service (PDIS), Manila, Philippines, functions as a clearinghouse for population-related social science data. The documentation of the data includes such information as title, author, year completed, abstract, owner's condition for use of the data, storage medium and location, and a copy of the questionnaire, coding scheme, and computer printouts generated. This annual catalogue, which contains informative summaries of studies on such topics as fertility behaviour, economic activity, migration, child feeding practices, and traditional birth attendants (*hilots*), has been published to inform policy-makers and researchers of the holdings of PDIS. (HC-L)

6306 **Royal Tropical Institute, Amsterdam. Medical Research Centre, Nairobi.** *Bibliography: studies in outpatient services in Kenya.* Amsterdam, Royal Tropical Institute, June 1980. 10p. Engl. See also entries 6737 and 6754.

This paper contains listings of publications, papers to be published, unpublished conference papers, reports, theses, etc., on operations research and related studies that were conducted in outpatient departments and maternal and child health services in Machakos and Kiambu districts, Kenya, from 1968-1976. (HC-L)

6307 **WHO, Geneva.** *World health forum; an international journal of health development.* Geneva, WHO. Engl. Refs.
Also published in French.

World Health Forum is a quarterly journal for policy-makers, health planners, administrators, health educators, and public health workers of all types. It provides a medium for the presentation and discussion of new concepts in public health and new approaches to health problems and it is devoted to the improvement of health through the promotion of health services covering the entire population and the undertaking of a wide variety of public health measures, whether or not they are supported by WHO. The Forum will strive to become the main organ of WHO's member states for the international exchange of health information and an active instrument in technical cooperation among developing countries. Readers' contributions are solicited. (Modified journal abstract)

6308 **WHO, Geneva.** *Traditional birth attendants; an annotated bibliography on their training, utilization and evaluation.* WHO, Geneva, 1979. 68p. Engl.

One hundred and seventy-eight annotated references are cited in this WHO bibliography on traditional birth attendants; 83 additional references without annotations are included in a separate section. Each of the above entries also contains author, title, and source information. In addition, there are author and geographic indices, an index of selected subjects, a directory of publishers and institutions, and a list of the terms used to designate traditional birth attendants in various countries. (DP-E)

II Organization and Planning

II.1 Health Workers

See also: 6620, 6624, 6625, 6631, 6634, 6649, 6677.

6309 **Beaton, G.R.** *Future health workers for southern Africa.* South African Medical Journal (Cape Town), 55(10), 10 Mar 1979, 385-387. Engl. 8 refs.

A model for a South African health system that incorporates the training of health workers as an integral component is presented and discussed. For this system to function properly, the educational goals for each type of health worker must be clearly stated and have certain elements in common. As part of these common goals, it is expected that each health worker will: function as part of a health team, with an appreciation for the roles of the other team members; have a basic understanding of the economic, political, social, and other non-medical causes of health problems; collect and record health-related information in a reliable and systematic way; etc. (DP-E)

6310 **Capote Mir, R., Villar Teijeiro, H., Vilá González, E.** *Administración de salud y el modelo de especialista de primer grado. (Health administration and the model of first degree specialist).* Revista Cubana de Administración de Salud (Havana), 4(4), Oct-Dec 1978, 297-303. Span.

This paper discusses the meaning of administration, the theoretical concept of health, and health administration within the rubric of socialist thought. It then describes, in point form, the functions of the specialist in health administration in Cuba. (HC-L)

6311 **Commonwealth Secretariat, London.** *Medical-legal issues.* London, Commonwealth Secretariat, 1979. 92p. Engl.
Combined Medical-legal Workshop, Linlongwe, Malawi, 8-12 Oct 1979.

This report of a workshop held by participants from Commonwealth countries in Africa and Asia discussed legislation on the use of paramedicals for community health care, commercial advertising inimical to health, medical termination of pregnancy and related issues, medicinal drugs, and miscellaneous matters. Included are the workshop agenda and the texts of four papers concerning the above-mentioned topics. A list of 48 recommendations is presented. (DP-E)

6312 **Cordera, A., Bobenrieth, M.** *Educational planning in health care.* Bulletin of the Pan American Health Organization (Washington, D.C.), 15(4), 1981, 377-389. Engl. 19 refs.
Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 91(6), 1981.

In discussing the basic educational planning process, the author defines a theoretical conceptual framework and the recommended learning and motivation principles enabling health sciences students to acquire knowledge, abilities, skills, and attitudes necessary for their development. The following steps in creating an appropriate programme are dealt with: establishment of main purposes and subpurposes of educational activities; definition of course content; application of problem-solving methods; recruitment of teaching personnel; assessment of teaching methods' impact on students knowledge, abilities, and attitudes; and preparation of administration, budget, and course announcement. The final evaluation phase, where the quality of the instructional process and its sequence and the effectiveness at course completion are assessed, is also discussed. (EB)

6313 **Dean, M.** *Health personnel: nurses and paramedical manpower.* Nursing Journal of India (New Delhi), 70(6), Jun 1979, 145-146. Engl.
Seminar on National Medical Education Policy, Chandigarh, India, Feb 1979.

The author outlines several aspects of health manpower development, particularly the training of nurses and paramedical personnel. Staffing and equipment budgets for hospitals need to be increased to allow them to fulfill their role as teaching centres. Supportive services for medical education such as laboratory and sanitary services must also be well-organized. Training for nurses should be upgraded to reflect new trends in medical technology. Courses in new postgraduate specialities for doctors should be accompanied by parallel courses for nurses and paramedical workers. The author concludes with several recommendations for increasing the participation of the nursing community in planning medical education . (FM)

6314 **Freyvogel, T.A.** *Collaboration suisse au développement de la santé publique en Tanzanie. (Swiss cooperation in the development of public health in Tanzania).* Sozial- und Präventivmedizin (Zurich, Switzerland), 24(2-3), May

1979, 127-140. Fren. 10 refs.

In 1961, the *Institut Tropical Suisse*, Basel, Switzerland, established at Ifakara, Tanzania, a teaching centre for medical, paramedical, and auxiliary personnel. Over the next 17 years, 770 young Africans received all or part of their training there. This paper examines the history of the centre and the role of various technical, benevolent, and governmental organizations involved in its evolution. Since 1978, the Tanzanian government has assumed full responsibility for its direction and maintenance. (HC-L)

6315 **Ghosal, B.C.** *Health programme in the rural set-up.* Journal of the Indian Medical Association (Calcutta, India), 70(10), 16 May 1978, 234-236. Engl.

The author traces the history of rural health services development in India, emphasizing the role of primary health centres and subcentres. Early development plans concentrated on establishing the basic infrastructure, while the most recent 5-year plan has broadened its scope to incorporate a long-term national health policy. Population control, provision of minimum health needs, control and eradication of major diseases, promotion of preventive medicine, and nutrition/health education are among the plan's priorities. Training of multipurpose auxiliaries and community health workers reflects the growing importance of the integrated approach to health planning. (FM)

6316 **Güel Jiménez, R., Heredia Díaz, J.G., Miranda Beaujean, J.** *Participación de los centros de salud en la enseñanza de personal técnico y auxiliar. (Participation of health centres in the training of technical and auxiliary personnel).* Educación Médica y Salud (Washington, D.C.), 13(1), 1979, 34-41. Span.

Treintasexta Reunión Anual de la Asociación Fronteriza Mexicano-Estadounidense de Salud, Cuidad de Reynosa, México, 1978.

The training of health technicians and auxiliaries for health institutions must be geared to the historic, economic, and cultural, as well as the epidemiological, situation in a given region. It is therefore suggested that training services be set up in Mexico's health centres with specific objectives designed to meet the needs of their communities. In addition to providing trainees with relevant experience, such an approach would foster more organized education and better service, favour optimal utilization of resources, determine with precision the distribution of teaching personnel and students, and set in motion a process of continuing education for professors as well as students. (HC-L)

6317 **Krishnamurthi, C.R.** *Active involvement of the people: exploring unconventional approaches.* International Journal of Health Education (Geneva), 22(3), Jul-Sep 1979, 143-149. Engl.

Also published in French, German, and Spanish.

This article examines some of India's achievements in health education in the past few years, the problems faced in the formulation of public policies, and the diversion of resources toward primary care. In 1974, it was decided that the almost 200 000 single-purpose health auxiliaries would be retrained as multipurpose workers, while additional workers would be trained to reach the ultimate goal of 7 male and 1 female workers:5 000 population. In 1977, additional programmes were begun that will eventually train over 500 000 health workers, one for each rural village. The planning and implementation of these three programmes are described in detail. (DP-E)

6318 **Lucchini, A.** *Método para la estimación del requerimiento de médicos. (Method for estimating physician requirements).* Revista Médica de Chile (Santiago), 107(1), Jan 1979, 71. Span.

This letter, prompted by a previous article entitled "Method for Estimating Physician Requirements", calls for clearer definition of the job descriptions of the various specialists and subspecialists, more precise identification of the conditions indicating the establishment of a department of digestive diseases in a given facility, and the allotment of more diagnostic hours to the practice of gastroenterology. (HC-L)

6319 **Paxman, J.M., Shattock, F.M., Fendall, N.R.** *Use of paramedicals for primary health in the commonwealth; a survey of medical-legal issues and alternatives.* London, Commonwealth Secretariat, 1979. 129p. Engl.

This report of a survey of 28 Commonwealth countries focuses on the types of medico-legal considerations that are likely to affect attempts to expand the roles of paramedicals. It examines the legislation governing the activities of paramedical personnel in such areas as clinical work, obstetrics, minor surgery, family planning, vaccination and immunization, emergency care, prescription of drugs, official medical examinations, forensic police work, notification of diseases, and the issuance of birth and death certificates. The impact of these restrictions on the availability of health care is assessed in the light of the pressing need for more paramedical personnel and alternatives are presented for eliminating harsh restrictions and facilitating the expansion of paramedical roles by providing these workers with appropriate legal backing. (DP-E)

6320 **Said, H.M.** Hamdard National Foundation, Karachi. *Training manpower for rural health coverage in Pakistan.* Karachi, Hamdard National Foundation, 1975. 8p. Engl.

Second Asian Congress of Agricultural Medicine and Rural Health, Teheran, Iran, 21-24 Apr 1975.

Health manpower training programmes for both professional and non-professional staff should be divided into three parts: conducting surveys to ascertain the needs of the population, selecting trainees, and training health and field workers. The author stresses that all training activities should have the support of the rural community. Other aspects of Pakistan's rural health programme are discussed, including the national health committee and the national health movement, student participation in the health programme, mass media and communications, health films, mobile health dispensaries, health literature, the health of the nation conference, agricultural medicine, and medicinal plants. (DP-E)

6321 **WHO, Alexandria.** *Integrated approach to health services and manpower development.* Alexandria, WHO, WHO/EMRO Technical Publication No. 1, 1978. 110p. Engl.
Ministerial Consultation on Health Services and Manpower Development, Teheran, Iran, 26 Feb-2 Mar 1978.

The 1st part of this report presents the topics discussed at the meeting. Section II provides background information, summarizes the procedure, and describes the opening session. Chapter 2 discusses the need for the integration of health manpower training with the development of health services, while chapter 3 examines the obstacles to such coordination. Chapter 4 summarizes approaches to coordination of training and services in the UK, Poland, and Latin America. The final chapter outlines the group's conclusions concerning means of strengthening coordination. Part 2 of the report includes background papers on health services and manpower development in the Eastern Mediterranean, the UK, Poland, and Latin America. (DP-E)

6322 **WHO, Geneva.** *Consultation on traditional medicine; draft report.* Geneva, WHO, 31 May 1976. 12p.
Consultation on Traditional Medicine, Geneva, Switzerland, 26-28 Apr 1976.
Unpublished document.

The WHO consultation on traditional medicine was convened to explore practical ways in which the vast resource represented by traditional medical practitioners might be brought to contribute effectively to the goal of full health care coverage. This paper presents an operational definition of what constitutes a traditional practitioner and recommends the immediate establishment of national policies regarding traditional medicine and the gathering of data on which to base longer term objectives, e.g., the devising of training programmes for traditional practitioners. An appendix presents a draft outline of a cultural study and health manpower survey for application at the national level. (HC-L)

II.2 Organization and Administration

See also: 6310, 6321, 6378, 6436, 6557, 6565, 6568, 6604, 6667, 6735, 6738, 6755, 6779, 6895, 6897.

6323 **Aguirre Vigouroux, R.** *Evolución de la odontología en el Servicio Nacional de Salud y su ubicación en la nueva estructura de salud. (Evolution of dentistry in the National Health Service and its place in a new health structure).* Odontología Chilena (Santiago), 26(119), Jan-Jun 1978, 5-9. Span.

A review of the proposed reorganization of Chile's national health services system reveals that dentistry has been relegated to the status of a paramedical activity under the jurisdiction of the medical profession—the culmination of 15 years of a gradual erosion of power that has been reflected in the flow priority and small budgets for dental programmes. The Chilean college of dentists is therefore requesting full representation on all the system's central, regional, and local councils and that dentistry be given the technical, administrative, and budgetary autonomy within the system befitting a competent, capable member of the health team. (HC-L)

6324 **al-Demluji, S.F.** *Tuberculosis control programme in Iraq.* Bulletin of Endemic Diseases (Baghdad), 18(1-4), Nov 1977, 7-12. Engl.

The history of tuberculosis control activities in Iraq is traced. The present national control programme was implemented in 1974 with the objectives of case-finding by direct microscopy, treatment by appropriate chemotherapy, prevention by BCG, and training of workers in the field. Technical aspects of these objectives and the role of the Iraqi Anti-Tuberculosis Society are examined. Tables present the standard schedules for treatment and retreatment of tuberculosis in Iraq. (DP-E)

6325 **Aliev, M.A.** *Obektivnaya neobkhodimosty dispanserizatsii pozhipykh lyutseil v selyskom rayone. (Objective need for dispensary care for elderly persons in a rural district).* Sovetskoe Zdravookhranenie (Moscow), 6, 1979, 30-33. Russ.

In accordance with government policy in the USSR, the character and conditions of labour, life, and health protection in the countryside should be changed. However, because of insufficient mechanization and its seasonal character, elderly people are indispensible in agricultural labour. To promote the labour longevity among the rural population, preventive medical examinations of elderly people are highly recommended. Morbidity in elderly people was studied in the Baryalinsk district of the Kaluga region, a district typical of the black earth zone. Incidence rates of diseases and their detailed analysis are presented. It was decided that dispensary services for elderly people will form part of the future health service development programme of the district. (Modified journal abstract)

6326 **Armas Cruz, R.** *Regionalización docente-asistencial. (Regionalization of medical teaching and health care delivery).* Revista Médica de Chile (Santiago), 107(1), Jan 1979, 84-89. Span.

The 1st part of this paper is devoted to a review of the various levels of medical attention available in Chile and the concept of regionalization. It is suggested that regionalization cannot function effectively without adequate support from the central teaching hospital toward the peripheral facilities. This type of support would be fostered if all staff employed in a given region received their training in that region, if the teaching hospital took care to establish scholarships in the specialties most needed in the region, and if the teaching hospital took full responsibility for the quality of services offered in the district and community hospitals under its tutelage. The last part discusses the actual role of the district general practitioner and ways of optimizing the quality of his work and professional development. (HC-L)

6327 **Basuki, B., Battaile, N., Eng, K., Meyer, E., Soedarsono, S.** University of Hawaii, Honolulu. *Indonesia; bhinneka tunggal ika. (Indonesia; diversity in unity).* Honolulu, Hawaii, University of Hawaii, School of Public Health, International Health Program, Comparative Public Health System, Monograph 5, May 1974. 290p. Engl. 137 refs.

This monograph combines a variety of contributions in an attempt to present a total view of public health in Indonesia. Background papers describe the historical development of health services, demographic characteristics of the country, features of the environment, and trends in population growth. Other chapters examine the organization of modern health care services, the major disease problems, the role of traditional medicine, and health manpower development. Nutrition and the development of family planning programmes are also covered. Foreign aid programmes are outlined and future trends in economic development and implications for health planning are discussed. (FM)

6328 **Baumslag, N., Cox, K., Laskin, M., Sabin, E.** *A.I.D. integrated low cost delivery system projects: health, nutrition and family planning; volume I: project summaries.* Washington, D.C., Department of Health, Education, and Welfare, Division of Program Analysis, Office of International Health, Aug 1978. 288p. Engl.

The Agency for International Development (US AID) is providing technical assistance, financing, or training in the development of 45 integrated low-cost rural health delivery projects combining health services, family planning, and nutrition programmes in developing countries. This volume summarizes 39 of these projects, while a companion volume will examine in more detail planned nutrition interventions and compare populations targeted, manpower to be used, and anticipated results. An index groups projects by region (Africa, Asia, Latin America, and the Near East), where they are then listed by country. Information presented in each entry includes project title and number, cost, duration, target population, area coverage, purpose, outputs and inputs, personnel, training, host country and other donor activities, issues, realistic alternatives, etc. Additional financial data are included in an index. (DP-E)

6329 **Berry, B., Davis, A.E.** *Community mental health ideology; a problematic model for rural areas.* American Journal of Orthopsychiatry (New York), 48(4), Oct 1978, 673-679. Engl. 16 refs.

The prevailing model for mental health services in the USA is found to be inappropriate with respect to many of the needs of rural communities. Special problems of rural areas (acceptance of care, visibility, authoritarianism, and manpower) are identified and suggestions are offered for revising mental health concepts and practices to promote a better fit between professional ideology and rural reality. These suggestions include establishing long-term community education programmes, using indigenous workers and volunteers, and having local physicians provide back-up services. (DP-E)

6330 **Bogaert Díaz, H., Martínez, D., Castellazi, Z., Gómez, A.** *Programa de control de la lepra en República Dominicana 1978-1982. (Leprosy control programme in the Dominican Republic, 1978-1982).* Revista Dominicana de Dermatología (Santo Domingo), 11(1), 1974, 23-48. Span.

The overall prevalence of leprosy in the Dominican Republic is 0.80:1 000, but the rate is as high as 1.80 in the national district and 13 in the municipality of Enriquillo, Barahona province. This paper describes the objectives, resources, administration, and organization of the 1978-1982 leprosy programme at the national level and by region. Job descriptions of the various personnel involved in the programme—from the director to the dermatology auxiliaries—are included. (HC-L)

6331 **Brasil, Câmara dos Deputados, Comissão de Saúde.** *Simpósio sobre política nacional de saúde; V.1: conferências. (Symposium on national health policy; v.1: papers).* Brasilia, Câmara dos Deputados, Comissão de Saúde, Centro de Documentação e Informação, 1980. 280p. Portuguese.

Simpósio sobre Política Nacional de Saúde, Brasilia, Brazil, 9-11 Oct 1979.

Papers on the following topics were presented at the *Simpósio sobre Política Nacional de Saúde*: health in the context of socioeconomic development; a policy of health manpower development; decentralization and regionalization of health activities; a discussion of nationalization and privatization within the health sector; health policy in Brazil over the past 50 years; and democratization of health. Questions and discussions occasioned by the papers are reported and the recommendations of the symposium are presented. (HC-L)

6332 **Chadha, S.L.** *School health services—planning and priorities.* Health and Population (New Delhi), 2(1), Jan-Mar 1979, 38-48. Engl.

The importance, status, problems, and priorities of school health services in India are discussed. The planning and administration of these services at the central, district, state, block, and village levels are outlined. A list of the services' most important functions includes appraisal of the children's health, necessary treatment, and health education. The roles of the school nurses and the teacher are examined. Among the 12 priorities listed are planning and organization, publicity, orientation courses for teachers, preparation of a school health manual, provision of adequate medical staff, improvement of environmental sanitation and school water supplies, nutrition programmes, etc. (DP-E)

6333 **Consejo Nacional de Ciencia y Tecnología, Mexico City. México, Secretaría de Salubridad y Asistencia.** *Investigación en servicios de salud (ISS). (Health services research (HSR)).* Mexico City, Consejo Nacional de Ciencia y Tecnología, 1979. 328p. Span.

Seminario sobre Investigación en Servicios de Salud, Querétaro, México, 13-15 Jul 1978.

Papers were presented on the following themes: the current state of health services research, with reference to the UK and the USA; epidemiology and systems theory in health services research; health services research programmes (including quality of care, biostatistics, cost-benefit studies, demand and utilization studies, etc.); training personnel in health services research; setting up a mechanism for health services evaluation (papers deal, respectively, with the USA, the UK, Mexico, and WHO); priorities, responsibilities, and coordination within health services research; and strategies for the development of health services research. The report includes the text of the discussions that followed the presentation of each theme plus an evaluation of the seminar and a presentation of its recommendations. (HC-L)

6334 **Djukanovic, V.** *Democratic Republic of North Vietnam.* In Hetzel, B.S., ed., Basic Health Care in Developing Countries; an Epidemiological Perspective, Oxford, UK, Oxford University Press, 1978, 102-117. Engl.

For complete document see entry 6343.

The author describes the present health care system in North Vietnam. Each family has a member trained by the Red Cross Society to carry out basic health tasks. Villages are organized into cooperatives with at least one health worker. Health centres in each commune provide preventive and curative services, as well as family planning and sanitation education. District health centres include dispensaries, a polyclinic, public health laboratory, and a hospital. Provincial centres provide general and specialized care, while the centre health system is the highest level of the referral system and provides evaluation, planning, and supervision of all other health services. (FM)

6335 **Donoso Infante, A.** *Atención médica progresiva y regionalización: base conceptual. (Regionalization and health care delivery: conceptual framework).* Revista Médica de Chile (Santiago), 106(12), Dec 1978, 1044-1050. Span. 25 refs.

This paper examines the concepts of hierarchy and regionalization with respect to health services in general and offers some comments regarding their application in Chile. (HC-L)

6336 **Economic Review, Colombo.** *Medical care and public health.* Economic Review (Colombo), 5(10), Jan 1980, 3-14. Engl.

Various aspects of Sri Lanka's health services are examined. Existing side by side with Western medicine is a traditional system of medicine; its three branches—*Ayurveda*, *Unani*, and *Siddha*—are described. In the Western system, the staffing component is considered the major problem, compounded by the usual developing country difficulties of maldistribution and the brain drain. After an examination of the system of medical education, the country's major health problems, especially environmental health and nutrition, are considered. The organization of the National Institute of Health Services and the roles of public health midwives and volunteer health workers are also discussed. Statistical data are included. (DP-E)

6337 **Ferretti, W.P.** *Realities of rural primary care.* Journal of Ambulatory Care Management (Germantown, Md.), 2, Feb 1979, 29-38. Engl. 11 refs.

Some common problems facing primary care delivery in the rural USA are discussed. These include the unfavourable projected ratio of primary care physicians to patients, the geographic maldistribution of primary care physicians, inadequate rural hospital facilities, the shortcomings of national health insurance, difficulties of long-range planning, inadequate reimbursement for primary care, and the decrease in capital funding resources. The author suggests that the only viable solution may be primary care services provided by non-physicians. (DP-E)

6338 **Franklin, E.R.** *Development of integrated oral health services in the African region.* Tropical Dental Journal (Dakar), 2(5), 1979, 58-69. Engl.

Among the radical changes that must be made to improve oral health care in Africa, priority should be given to total preventive care, decentralizing and integrating dental health services with all other medical services, and redesigning training programmes to reflect the new priorities. New training programmes should stress the concept of the health team, with the dental surgeon acting as team leader, supported by dental auxiliaries. Careful planning and cooperation from all levels of health care is necessary to develop an effective infrastructure and eliminate duplication. Sample data sheets are provided as a means of conducting simplified surveys of dental health, an important preliminary to any changes. (FM)

6339 **Gilmurray, J., Riddel, R., Sanders, D.** *From Rhodesia to Zimbabwe, the struggle for health.* London, Catholic Institute for International Relations, 1979. 59p. Engl.

This volume of the series "From Rhodesia to Zimbabwe" covers health and development, population and development in Rhodesia, the disease pattern, the present health service, and future health services. It is argued that the standards of health are directly related to levels of development and that there is a direct link between widespread structurally induced poverty and the prevalence of disease. Rather than building more hospitals, the authors recommend a new approach that combines universally accessible primary care with democratic control of the health service through a newly created group of village health workers. They also criticize recent proposals concerning the future of the health services. (DP-E)

6340 **Gish, O.** *Planning health services in Swaziland.* Tropical Doctor (London), 9(4), Oct 1979, 200-208. Engl. Refs.

After examining and evaluating the hospital and clinical services presently available in Swaziland, the author makes a number of recommendations concerning health manpower, the rural infrastructure and public health centres, hospitals, and the organization and administration of health centres. These recommendations stress the need to train and use auxiliaries, decentralize health services and simplify hospitals, and integrate curative and preventive services. Statistical data on hospital admissions and efficiency are included. (DP-E)

6341 **Good, C.M., Hunter, J.M., Katz, S.H., Katz, S.S.** *Interface of dual systems of health care in the developing world: toward health policy initiatives in Africa.* Social Science and Medicine (Oxford, UK), 13D(3), Nov 1979, 141-154. Engl. 114 refs.

In Africa and in many other developing areas, traditional and modern medical systems exist side by side; often antagonistic to each other, neither system is adequately meeting health care needs. This article explores the possibilities of integrating these two systems to make the most effective use of scarce resources. It is suggested that the modern system be articulated downward and be integrated with traditional medicine at the village level through referral systems and training programmes, while traditional medicine can be supported by the modern system with the use of village health aides, traditional birth attendants, traditional psychiatric aides, village drug stocks, herbal medicine research, and referral systems. (Modified journal abstract)

6342 **Hai-Feng, C.** *China: Tachai village.* In Hetzel, B.S., ed., Basic Health Care in Developing Countries; an Epidemiological Perspective, Oxford, UK, Oxford University Press, 1978, 118-120. Engl.

For complete document see entry 6343.

The model village of Tachai, People's Republic of China, reflects the changes that have taken place in that country since the Cultural Revolution. Improvements have been made in sanitation, living conditions, health facilities, and attitudes to health. Pests have been eliminated and most of the major diseases, such as smallpox, cholera, plague, and malaria, have been eradicated. As a result of the improved health status of the population, agricultural production has also increased. (FM)

6343 **Hetzel, B.S. ed(s).** *Basic health care in developing countries; an epidemiological perspective.* Oxford, UK, Oxford University Press, 1978. 186p. Engl. Refs.

See also entries 6334, 6342, 6346, 6354, 6363, 6536, 6568, 6594, 6633, 6637, and 6895.

Following an introductory chapter on community health, chapter 2 examines the health care system in Papua New Guinea and presents a case study of village health problems and services. Chapter 3 describes a pilot project involving rural health units in the Philippines and outlines training courses offered by the Institute of Rural Reconstruction. Chapters 4 and 5 review the development of health care in India and North Vietnam. Also included are three papers on the People's Republic of China describing a model health village, the development of rural health services, and the training of barefoot doctors. Other chapters cover health information systems, village-based health care resources, and the epidemiological context of primary health care. (FM)

6344 **Hocking, B.** *Occupational health in Papua New Guinea.* Papua New Guinea Medical Journal (Port Moresby, Papua New Guinea), 19(2), Jun 1976, 71-73. Engl.

Occupational health hazards in Papua New Guinea can be attributed either to demographic changes or to the introduction of new work processes. National strategies for dealing with these problems include setting up an occupational health unit under the jurisdiction of the Department of Labour, assessing all new development projects in terms of worker safety, passing suitable legislation, and training non-medical persons to deal with occupational hazards. On a provincial level, provincial health officers should be registered, health centres should be set up for groups of work places, safety committees should be organized, and workers should be trained in first aid. (DP-E)

6345 **Hooey, D.H.** *Changing concepts in medical care.* South African Medical Journal (Cape Town), 53(21), 27 May 1978, 821-823. Engl.
Seminar on Maternal and Child Health Care Delivery, Durban, South Africa, 1 Jul 1977.
See also entry 5429 (Volume 8).

In this summary of a paper presented at a South African seminar on maternal child health, six major changes aimed at improving national health services are recommended. These are: eliminating the artificial division between curative and preventive services, involving the specialist in the organization of health services, utilizing the general practitioner within the various specialist departments, utilizing paramedical personnel more effectively, improving outpatient services, and emphasizing health education. The effects of these changes on the health services in South Africa are discussed. (DP-E)

6346 **Hsiang-Kuan, C.** *China: rural health service.* In Hetzel, B.S., ed., Basic Health Care in Developing Countries; an Epidemiological Perspective, Oxford, UK, Oxford University Press, 1978, 121-128. Engl.
For complete document see entry 6343.

The author traces the changes that have taken place in the structure of health services in the People's Republic of China since the Cultural Revolution. The two key elements are the development of a cooperative medical system and the training and utilization of barefoot doctors. Both have contributed to improved health care in rural areas. Different types of training programmes are described and the role played by the barefoot doctor is outlined. The author concludes by describing the health facilities and staff of a typical commune. (FM)

6347 **Jegathesan, M., de Witt, G.F.** *Experience with the accreditation of private laboratories.* Medical Journal of Malaysia (Singapore), 32(4), Jun 1978, 331-335. Engl.

In 1974, private Malaysian laboratories were invited to apply for accreditation for the examination of cooked frozen prawns. The laboratories were required to meet certain criteria with respect to physical facilities, personnel qualifications, methodology, materials, and quality control and to perform a satisfactory bacteriological analysis on a sample provided by the committee while under scrutiny by the same. This paper discusses the accreditation process, its results, and the shortcomings of some of the laboratories. It is suggested that this experience would be of value in gauging the overall standards of private laboratories and the possible role of government committees in ensuring their quality. (HC-L)

6348 **Journal of the Indian Medical Association, Calcutta.** *Rural health care: problems and priorities.* Journal of the Indian Medical Association (Calcutta, India), 70(10), 16 May 1978, 230-233. Engl.

The system of primary and secondary health centres in India is not sufficient to meet the needs of rural communities. Consequently, reorganizing the infrastructure and remotivating professional and paraprofessional health personnel should be the priorities of the national health plan. The author discusses the role and training of community health workers and the integration of modern and traditional practices. Several suggestions for improved training of physicians are also outlined. A proposal requiring graduating medical students to serve in rural areas for a period of 2 years would help correct the concentration of doctors in urban areas. (FM)

6349 **Kantor, L.E., Kausch, D.F., Smith, L.L.** *Development of an aftercare program in a nonmetropolitan area.* Community Mental Health Journal (New York), 14(1), 1978, 46-53. Engl.

This article describes the development of a non-traditional aftercare programme in a predominately rural area of Ohio (USA). The programme was initiated by a citizens' board concerned with the lack of follow-up services provided to patients discharged from a distant state hospital. The planning format as conceived by representatives of this board is outlined and the steps involved in implementing specific services and a research programme are described. Some of the programme's limitations and its future directions are discussed. (Modified journal abstract)

6350 **Kirk, R.F., Spears, R.M.** *Development of rural health services; problems illustrated by a nonprofit, privately-based approach.* Medical Care (Philadelphia, Pa.), 17(2), Feb 1979, 175-182. Engl. 18 refs.

The historic development of a non-profit organization designed to improve rural health services in Colorado (USA) is described and some of the major problems of rural health are discussed. The corporation, originally derived from four different kinds of provider organizations, has developed a comprehensive approach to improving the utilization of existing rural health resources and to the recruitment and deployment of new resources. Emphasis has been placed on community involvement, decreasing the isolation of rural physicians by linking rural practices with urban resources, centralizing supportive services, and developing quality control methods. The peculiarities of the target area and the evolution of the goals and methods of the organization are described in order to facilitate the adaptation of these concepts to other areas. (Modified journal abstract)

6351 **Kotzé, R.L., Jooste, M.** *Aandeel van geneeskundige dienste in rampbestryding. (Role of medical services in combatting disasters).* South African Medical Journal (Cape Town), 54(2), 8 Jul 1978, 61-64. Afrikaans.

Natural and man-made disasters are an ever present threat, particularly in densely populated cities. Doctors and other health care providers plead for comprehensive action plans to ensure survival in cases of disaster. Disaster medicine represents a new, multidisciplinary, and comprehensive approach. To combat disasters, however, requires knowledge of, and participation by, many disciplines within and outside the field of medicine. Guidelines to initiate a comprehensive and coordinated anti-disaster programme are presented. The purpose is to ensure that all resources are used with maximum effect and that all stumbling blocks to efficiency are removed. (Modified journal abstract)

6352 **Leisinger, P., Gerster, R.** *Medizinische Entwicklungszusammenarbeit—zum Beispiel von Helvetas in Bhutan. (Medical development cooperation—the example of Helvetas in Bhutan).* Sozial- und Präventivmedizin (Zurich, Switzerland), 24(2-3), May 1979, 197-200. German.

Helvetas, the Swiss Association for Technical Assistance to Developing Countries, is assisting the government of Bhutan to implement a very promising health care system. The system is based on health centres staffed by health assistants and health workers who are responsible for curative medicine and public health, respectively. Its introduction, however, is hampered by geographic and climatic difficulties (mountains, jungles, monsoons, etc.), competition from traditional practitioners, attitudes of health workers who are sometimes tactless and pretentious in their dealings with people, unrewarding practice conditions, and conflicts of interest that the application of an anti-elitist health care concept causes at the decision-making level. This paper discusses these problems in some detail. (Modified author abstract.)

6353 **Lipowski, Z.J., Brockway, S.** *Psychosomatics and the Third World.* Papua New Guinea Medical Journal (Port Moresby, Papua New Guinea), 23(1), Mar 1980, 8-16. Engl. 36 refs.

After discussing the definition and scope of modern psychosomatic medicine, the authors examine the basic postulates and concepts of psychosomatics. Some current directions in psychosomatic research are outlined and the relationship between psychosomatic medicine and patient care is described. It is pointed out that the traditional health systems of many developing countries are psychosomatic in approach. The authors maintain that psychosomatic medicine is relevant to the theory of disease, research, clinical practice, and health worker training. (DP-E)

6354 **Malcolm, L.A.** *Papua New Guinea: the health care system.* In Hetzel, B.S., ed., Basic Health Care in Developing Countries; an Epidemiological Perspective, Oxford, UK, Oxford University Press, 1978, 38-62. Engl. Refs.
For complete document see entry 6343.

Following general information on the environment and population of Papua New Guinea, the author outlines major morbidity and mortality trends and examines the present health care system. He also presents future plans for further decentralization of the system that would place greater emphasis on community development and preventive medicine. The key element in rural health services is the health centre, which is staffed by health extension officers, nurses, and orderlies who provide comprehensive care to an optimum population of 12 000. Each centre is also responsible for a number of aid posts that serve groups of isolated villages. The role and utilization of aid post orderlies, nurses, health extension officers, and doctors are also described. (FM)

6355 **Najera-Morondo, J.A.** *Suggested approach to malaria control and to the methodology applicable in different epidemiologic situations, based on experience in the Americas.* Bulletin of the Pan American Health Organization (Washington, D.C.), 13(3), 1979, 223-234. Engl. 37 refs.

Malaria programmes in the Americas experienced rapid progress during the 1950s and early 1960s, slowed down during the late 1960s, and have remained practically stationary throughout the last decade. Consequently, no country with areas still in the attack phase has the resources to complete eradication within a limited period of time. Leaders in the campaign against malaria are now advocating redefinition of the problem in terms of its seriousness in relation to other health problems and the expected efficacy of the available attack measures. This paper elaborates the practical implications of this new approach. (HC-L)

6356 **Neghme, R. A.** *Memorandum sobre los problemas de salud y médicos que preocupan a los académicos. (Memorandum on public health and medical problems of concern to the academics).* Revista Médica de Chile (Santiago), 107(5), May 1979, 455-456. Span.

The Chilean academy of medicine has expressed concern over what it sees as deterioration in the quality of medical care due to inadequate financial support for recent innovations such as the concept of regionalization of services and training. The academy has therefore requested the reestablishment of the health consultative council—and representation on it—with a view to ensuring that any change affecting the structure and/or operation of the health services is carefully analyzed by an experienced group of professionals to ensure its feasibility and proper implementation. (HC-L)

6357 **Ofosu-Amaah, S.** *Maternal and child health services in Ghana (their origins and future).* Journal of Tropical Medicine and Hygiene (London), 84(6), Dec 1981, 265-269. Engl. 33 refs.

In this paper the author traces 50 years of the history and development of maternal and child health (MCH) services in Ghana and describes factors that led to the present separation between hospital and community services in MCH. While considerable improvements in such services have been achieved in urban areas, further attention must be focused on the quality of life in rural and disadvantaged areas. Today, only about 25% of children are delivered by trained midwives, mainly in Accra. In order to service smaller, less accessible areas of the country, it will be necessary to train local candidates. Also required are joint planning and cooperation with agencies such as social welfare and education and implementation of a public health care strategy. (EB)

6358 **Ossi, G.T.** *Malaria eradication programme in Iraq, 1970-1975.* Bulletin of Endemic Diseases (Baghdad), 18(1-4), Nov 1977, 13-33. Engl.
Malaria Border Meeting, Teheran, Iran, 24-26 Feb 1976.
See also entry 6359.

The progress of Iraq's malaria eradication programme from 1970-1975 is considered. After an analysis of the epidemiology of the disease in Iraq, malaria operations are described. These included spraying, surveillance, entomological activities, antilarval measures, treatment, laboratory services, geographical reconnaisance, and budgeting. A plan of action for 1976 and future prospects are outlined. Copious statistical data are appended. (DP-E)

6359 **Ossi, G.T.** *Malaria eradication programme Iraq, 1976.* Bulletin of Endemic Diseases (Baghdad), 18(1-4), Nov 1977, 63-73. Engl.
Malaria Border Meeting, Baghdad, Iraq, 26-28 Feb 1977.
See also entry 6358.

The progress of Iraq's malaria eradication programme and its activities during 1976 are discussed. Operational control measures included spraying, surveillance, and larviciding. An epidemiological evaluation and entomological observations were carried out. Other activities included radical treatment of positive cases, presumptive treatment, laboratory services, and training. Copious statistical data are appended. (DP-E)

6360 **Project Concern, San Diego, Cal.** *Concern News.* San Diego, Cal., Project Concern. Engl.

This quarterly newsletter reports on the activities of Project Concern, a non-sectarian, charitable health care training organization established to provide primary and preventive care, nutrition, and paramedic training and public health education to needy people in rural USA and around the world. Many Project staff are volunteers, whose contributions are highlighted. (DP-E)

6361 **Rodrigues, W.** *Family planning; a basic and essential activity in maternal-child health programs.* Rio de Janeiro, Sociedade Civil Bem-Estar Familiar no Brasil, Department of Information and Education, Dec 1979. 60p. Engl. Refs.

The 1st part of this document deals with Brazil's maternal child health programme and covers such topics as demographic factors, mortality, pregnancy and childbearing risks, economics, abortion, and fertility. The 2nd part, on family planning, presents the justification and objectives of family planning programmes, evaluates various contraceptive methods (especially the IUD and the birth control pill), and describes the framework of a community-based family planning programme. Suggestions for a national family planning programme are given. Statistical data are included. (DP-E)

6362 **Sabastian, E.V.** *Expanded programme of immunisation for children.* Health and Population (New Delhi), 2(1), Jan-Mar 1979, 67-79. Engl.

WHO's Expanded Programme of Immunization (EPI) for children operates as part of India's maternal child health services and is financed by this budget. The EPI is a long-term programme designed to provide continuing and increasing vaccination coverage against diphtheria, pertussis, tetanus, tuberculosis, poliomyelitis, typhoid, measles, and smallpox. The epidemiology, morbidity, and mortality of these diseases are discussed. Various aspects of the EPI, including the cold chain, the availability of vaccines, health education, and evaluation, are examined and the immunization schedules outlined. Statistical data are included. (DP-E)

6363 **Sharma, R., Chaturvedi, S.K.** *India.* In Hetzel, B.S., ed., Basic Health Care in Developing Countries; an Epidemiological Perspective, Oxford, UK, Oxford University Press, 1978, 87-101. Engl. Refs.
For complete document see entry 6343.

The authors briefly review the history of health care in India and trace population growth since 1901. Present-day health services are based on primary health centres, rural and district hospitals, and teaching institutions. The duties of various health personnel attached to the primary centres are also described. Results of a number of recent sociocultural studies have identified the major health problems, health needs, and the patterns of utilization of services in rural areas. Changes in the utilization of personnel and recruitment of community health workers should improve rural health care. (FM)

6364 **Silva Costa, I., Magalhães, M.M., Guedes de Souza, R.** *Considerações sobre o modelo integrado de saúde rural a nível de assistência sanitária simplificada. (Analysis of the integrated rural health model as the level of* *simplified sanitary assistance).* Revista Baiana de Saúde Pública (Salvador, Brazil), 5(3-4), Jul-Dec 1978, 113-119. Portuguese.

The ***Programa Integrado de Saúde Rural*** was developed in order to bring a number of basic services (maternal and child health, school health, communicable disease control, etc.) to the 43 660 urban and rural inhabitants of the municipality of Cruz das Almas, Bahia, Brazil. This was to be accomplished by strengthening existing services, adding two rural health posts, and training and deploying auxiliary health workers in various capacities. This paper describes the activities of the programme during its 1st year of operation. (HC-L)

6365 **Singh, K.** *Outlines of a community oriented medical college and hospital.* Journal of the Indian Medical Association (Calcutta, India), 70(10), 16 May 1978, 240-242. Engl.

Reorganization of hospitals and medical education in India is required to fulfill the needs of rural populations. An ideal, community-oriented infrastructure would comprise a central, 200-bed hospital, complemented by 5-6 peripheral hospitals of 50-60 beds, each with its own transport system serving a number of rural clinics. Patients transferred to the central hospital would return to the peripheral hospitals as soon as possible. A large portion of the hospital's budget would be devoted to the department of community medicine, which would be responsible for health education, training of multipurpose auxiliaries, sanitation, control of infectious diseases, maternal child health, and school health. The medical college would emphasize community health in its curriculum and medical students would work in the peripheral hospitals. (FM)

6366 **Soto Padrón, F., Pagola Prado, V.** *Experiencias obtenidas en el regional Boyeros en un quinquenio de atenciòn estomatològica a la embarazada. (Experiences in the Boyeros region during five years of dental care given to pregnant women).* Revista Cubana de Estomatologia (Havana), 13(2), May-Aug 1976, 117-120. Span.

Since 1971, in the region of Boyeros, Cuba, pregnant women have been systematically referred for dental care via the obstetric services. As a result, the percentage of pregnant women being admitted to and discharged from the dental services rose steadily during the 5 years that followed, reaching levels of 85.4% and 60.2% in 1975. This paper describes the referral mechanism and the coordination between the obstetric and stomatology teams and the mass organizations that it involves. (HC-L)

6367 **Stephen, W.J.** *Developing countries.* In Stephen, W.J., Analysis of Primary Medical Care; an International Study, Cambridge, UK, Cambridge University Press, 1979, 318-356, 394-395. Engl. Refs.

The basic social, economic, and health problems of the developing countries are outlined and the failure of Western hospital- and physician-oriented health care models to meet the needs of these nations is explained. While primary care, when available and acceptable, is considered by many the best solution, other alternatives include national change (e.g., revolution), the extension of existing systems, and local community development. As examples of functional systems, the health services of Chile and Cuba are analyzed in terms of structure and organization, primary medical care, and politics and health care. Statistical data are included. (RMB)

6368 **Subulola Goyea, H.** *General and specific problems of field work in child health care: Benin City.* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(4), Aug 1978, 167-170. Engl.

Problems facing field workers in child health in Benin City, Nigeria (e.g., difficulties in locating addresses and scheduling visits outside parental working hours, misunderstandings regarding the visit's purpose, and language barriers) are individually discussed and the importance of meaningful, properly-filled-out medical records is stressed. It is also suggested that more public health nurses be trained to cope with the demand for better community health care and that their syllabus highlight problems such as those mentioned above. (HC-L)

6369 **Susila, M.** *Decade of health development (1968-1978).* Jakarta, Ministry of Health, 1978. 24p. Engl.

In this review the author looks at a decade of health development in Indonesia within the framework of overall national development. Topics covered include service patterns within the ministry of health, main health problems, and development trends summarizing the following: health infrastructure, health manpower, health restoration and promotion, communicable disease control, health education/information, drug and food control, research, and supporting components in the execution of various health development programmes. Also mentioned are improvements made in medical facilities, transportation, and other commodities, e.g., office furniture and equipment. (RMB)

6370 **Tejada-de-Rivero, D.** *Technical cooperation and information exchange in primary health care.* Annals of the New York Academy of Sciences (New York), 310, 21 Jun 1978, 26-30. Engl.

After defining primary care, the author discusses its scope and universal elements, stressing the fact that, since primary care should evolve from and reflect the unique aspects of national and community values, conditions, and life-styles, there is no universal model to be followed. Aspects of technical cooperation, including WHO's role, and information exchange are also examined. It is suggested that the developing world has much to teach the developed world in the realm of primary care. (DP-E)

6371 **Visher, J.S., Visher, E.B.** *Impressions of psychiatric problems and their management: China, 1977.* American Journal of Psychiatry (Hanover, NH), 136(1), Jan 1979, 28-32. Engl. 8 refs.

The authors, who visited the People's Republic of China in October 1977, describe the psychiatric treatment methods used there, particularly in the Shanghai Mental Hospital, a 1 000-bed facility for acutely ill patients. Psychiatric treatment appears to be a blend of Western pharmacology, traditional Chinese medicine, and group therapy. The authors also speculate on the possible cultural sources of stress-related and interpersonal problems, provide a review of the literature regarding psychiatry in modern China, and outline the history of psychiatric treatment there. (Modified journal abstract)

II.3 Planning

See also: 6511, 6605, 6674, 6707, 6759, 6772.

6372 **Banta, H.D., Sanes, J.R.** *Assessing the social impacts of medical technologies.* Journal of Community Health (New York), 3(3), Spring 1978, 245-258. Engl. 32 refs.

The introduction of a new medical technology can have indirect, unintended, or unanticipated effects on individuals or on social systems. Although these impacts result from the widespread use of the technology, many of them can be predicted while the technology is being developed. A method for systematically identifying and evaluating these impacts is technology assessment. Such an assessment, made while the technology is being developed, could provide useful information for decision-making about research and development and planning for the technology's eventual introduction. (Modified journal abstract)

6373 **Beghin, I., Canto, J. del, Teller, C.** *Malnutrition, national development, and planning.* Bulletin of the Pan American Health Organization (Washington, D.C.), 13(3), 1979, 285-292. Engl. 23 refs.

Experience has shown that malnutrition is structurally founded, i.e., the result of a social system that is unable to meet the basic needs of a large share of its population. As such, it has no technocratic solution and must be dealt with at the political level. Recognizing this, the Institute of Nutrition of Central America and Panama (INCAP), Guatemala, is now assisting member countries to reorient their development plans to give priority to satisfying nutritional objectives—a global as opposed to interventionist approach to the problem. These concepts, as well as some of the key issues currently being addressed by nutrition planners, are discussed in this paper. (HC-L)

6374 **Bibile, S.** UNCTAD, Geneva. *Case studies in transfer of technology: pharmaceutical policies in Sri Lanka.* Geneva, UN, 27 Jun 1977. 1v.(various pagings). Engl. Refs.

Part 1 of this UNCTAD report deals with policy and institutional framework and covers such aspects as the features and evolution of drug policies, Sri Lanka's national formulary committee, drug approval, drug nomenclature, and official sources of information. The principles of operation discussed in part 2 include the function and structure of the state pharmaceutical corporation, drug purchasing, sales and inventory control, and pharmaceutical production. Copious statistical data are contained in 11 annexes. (DP-E)

6375 **Bradfield, R.E., Rees, C.P.** *Environmental practices in developing countries.* Environmental Pollution Management (London), 9(4), Jul-Aug 1979, 110-112. Engl.

This paper presents, in 12 items, a study outline of factors to be taken into consideration in the development of a strategy for pollution control in a developing country. The multidisciplinary approach indicated by the range and complexity of the factors, however, cannot possibly be taken until developing countries have their own trained planners, engineers, economists, ecologists, etc. In the meantime, it is recommended that students be familiarized with the techniques of incorporating environmental considerations into the planning stages of development and of evaluating the administrative, technical, and legal aspects of various environmental problems. (HC-L)

6376 **Degoma, E.S., Ouano, E.A., Polprasert, C.** *Need for integrated planning in rural health services.* Progress in Water Technology (Oxford, UK), 11(1), 1978, 97-107. Engl. 25 refs.

Development schemes to improve the health of rural populations through prevention of communicable diseases should be considered in the context of some kind of sanitation package to ensure effectiveness. The general practice of concentrating resources on limited objectives such as water quality improvement is shown to be less effective than allocating the same resources to multiple objectives defined in a sanitation package. Systems Dynamic Modeling based on the DYNAMO II language is presented as a capable tool for sanitation systems planning. (Modified journal abstract)

6377 **Dunn, J.W., Docksen, G.A.** *Model analysis of rural health care systems.* Oklahoma City, Oklahoma State University, Oklahoma Agricultural Experiment Station, Technical Bulletin T-152, May 1979. 73p. Engl. Refs.

The main purpose of this model is to simulate actual behaviour in the health care system accurately enough to make it a useful aid in health care planning; as an example, the model is applied to rural Oklahoma (USA). Separate sections discuss the model's construction, how to apply it, the prediction of future health care usage, costs of error in input data, and summary, conclusions, implications, and limitations. Copious statistical data are included. (DP-E)

6378 **Egger, C.A.** *UNICEF's involvement in the health sector and primary health care.* Sozial- und Präventivmedizin (Zurich, Switzerland), 24(2-3), May 1979, 187-190. Engl.

The primary health care (PHC) approach to the implementation of health services was adopted by WHO and UNICEF in 1975 in response to the growing demand for health care on the part of the world's underprivileged. It aims to bring basic health services to the largest number of people possible through the deployment of community health workers; its application involves political commitment, appropriate technology, administrative decentralization, community participation, and a new relationship between health and other (e.g., environmental) services. This paper briefly examines the nature and implications of PHC and the role of the international agencies in promoting its development. (HC-L)

6379 **Falck, V.** *Planning health education for a minority group: the Mexican Americans.* International Journal of Health Education (Geneva), 22(2), Apr-Jun 1979, 113-121. Engl. 13 refs.

A series of planned interactions designed to provide an opportunity for representatives of the Mexican American health community to discuss the health education needs of this Texan minority group with other community agencies is described. These interactions included a telephone survey, advisory committee meetings with four Mexican American community leaders representing various health agencies, a working conference of 40 participants involved in Mexican American health activities, a task force meeting intended to develop an instructional programme and behavioural objectives for health professionals, and an information-sharing conference. The results of these activities have not yet been evaluated. (DP-E)

6380 **Gish, O., Feller, L.L.** *Planning pharmaceuticals for primary health care: the supply and utilization of drugs in the Third World.* Washington, D.C., American Public Health Association, International Health Programs, Monograph Series No. 2, 1979. 138p. Engl. Refs.

Parmaceuticals constitute as much as 40% of the total budget of health ministeries in developing countries but have been relatively neglected in the health care literature to date. This monograph discusses the nature and development of the international pharmaceutical trade; examines the implications of current patenting, promotion, prescribing, producing, and distribution practices for drug consumption in the developing world; and puts forward a number of recommendations aimed at encouraging developing countries to develop their own drug industries, appropriate to their health needs and financial capability. (HC-L)

6381 **Green, L.W.** *National policy in the promotion of health.* International Journal of Health Education (Geneva), 22(3), Jul-Sep 1979, 161-168. Engl.

Also published in French, German, and Spanish.

A methodology for planning health education programmes is presented. The author examines such aspects as obtaining information, making decisions, policy issues, and the role of the government and the mass media. The need to involve the public in decision-making is stressed. (DP-E)

6382 **Haugejordan, O.** *Proposal of a hierarchial classification of health service objectives, activities and resources.* Public Health (London), 93(6), Nov 1979, 358-362. Engl. 17 refs.

After reviewing existing terminology, the author proposes a new classification system for health service objectives, activities, and resources, suggesting a more restricted use of these three words in planning and evaluation. The new definitions emphasize the end result and effect of programmes on health and efficiency. They also allow a distinction to be made between evaluation of performance and of outcome. It is felt that a standard, unequivocal terminology would improve interdisciplinary cooperation, facilitate teaching, and clarify the literature on health planning and evaluation. Health administrators would also become more aware of a programme's effect on health status and less preoccupied with performance and organization. (FM)

6383 **Instiut du Sahel, Bamako. Comité Permanent Interétats de Lutte contre la Sécheresse dans la Sahel, Ouagadougou.** *Programme santé—eau—nutrition; rapport de la Réunion des Techniciens de la Recherche et de la Formation en Santé—Eau—Nutrition. (Health-water-nutrition programme; report of a meeting of technicians involved in research and training in health-water-nutrition).* Bamako, Institut du Sahel, 1979. 31p. Fren.

Réunion des Techniciens de la Recherche et de la Formation en Santé-Eau-Nutrition, Bamako, Mali, 18-21 Apr 1979.

Unpublished document.

A total of 21 delegates from 5 countries in the Sahel met to formulate specific research and training programmes relating to health, water, and nutrition. This report outlines the organization and objectives of the meeting, summarizes the main conclusions and recommendations of each working group, and presents the participants' evaluations. Among the recommendations for future action were the creation of a special fund to support research and the appointment of a coordinator in each participating country to oversee the implementation of research projects. A list of participants, agenda, and key-note speeches are included in appendices. (FM)

6384 **Iwugo, K.O.** *Appropriate sanitation technology planning and implementation in Africa.* Environmental Pollution Management (London), 9(4), Jul-Aug 1979, 100-102. Engl. 13 refs.

The general trend in excreta disposal in most African countries has been the adoption of conventional waterborne sanitation—a solution that is often uneconomical, culturally unacceptable, and designed to satisfy environmental rather than health requirements. This paper suggests an organizational framework to ensure that most appropriate sanitation technology for a community is identified during the planning stages of sanitation projects. (HC-L)

6385 **Iwugo, K.O.** *Factors affecting the implementation of improved sanitation in Africa.* Royal Society of Health Journal (London), 99(1) Feb 1979, 28-30. Engl. 9 refs.

An attempt is made to discuss several miscellaneous factors that are crucial to the successful implementation of any improved sanitation system in Africa. These factors comprise health, institutions and manpower, user acceptance and education, children and fecally-transmitted diseases, and the advantages and disadvantages of communal and private sanitation systems. Statistical data on the age of maximum prevalence of some major excreted infections in indigenous populations are included. (DP-E)

6386 **Lwanga, S.** *Statistical principles of monitoring and surveillance in public health.* Bulletin of the World Health Organization (Geneva), 56(5), 1978, 713-722. Engl.
Also published in French and Spanish.

Monitoring and surveillance are seen as statistical procedures that will help health authorities to achieve better health services with existing resources. This article discusses various components of monitoring and surveillance systems, including: selection of subject (specification of target groups); monitoring stimuli; monitoring events; data collection, recording, and processing; and dissemination and utilization of data output. Statistical considerations are also examined and outlined in a checklist in the annex. (DP-E).

6387 **Mackay, J.** *Health care in the Third World; a new policy for VSO.* London, Voluntary Service Overseas, 1979. 9p. Engl. 14 refs.

Recognizing the fact that ill health in the Third World is only one symptom of the enormous disease of poverty, the British organization, Voluntary Service Overseas (VSO), is now seeking to support only those projects that are involved in the promotion of more equitable, more appropriate systems of health care. To this end, it is looking for volunteers who can view health problems in a wider perspective than their standard Western training will have given them. This paper reviews the health situation in developing countries, outlines and expands VSO policy, and gives some examples to illustrate the type of project and volunteer that it is looking for. (HC-L)

6388 **McIntosh, C.** *Food and nutrition in national development planning.* Cajanus (Kingston, Jamaica), 12(2), 1979, 111-116. Engl.
National Seminar on Food and Nutrition Planning, Antigua, 1-2 Jun 1978.

This paper discusses the role of food and nutrition in development planning and identifies a number of prerequisites to the implementation of suitable food and nutrition projects in the Caribbean. These include political acceptability, adequate financing, administrative support, manpower resources, appropriate technology, good communication (coordination), and mechanisms for conflict resolution. (HC-L)

6389 **Moes, J.E.** *Essential aspects of nutrition-oriented development planning, with emphasis on the agricultural sector.* Philippine Journal of Nutrition (Manila), 29(4), Oct-Dec 1977, 147-164. Engl.

In the next 5 years, the National Nutrition Council nutrition intervention programme is expected to alleviate malnutrition among the most vulnerable groups in the Philippines, but it cannot eradicate the causes of malnutrition—poverty and social factors. Sufficient food must be produced and distributed efficiently at a reasonable price. The other requirement is a rise in effective demand, especially by increasing the income of the poorest people. Not only agricultural, but all productive sectors of the economy, must contribute to that. Agricultural planning must be designed to assist small farmers and farm labourers, who are themselves at risk of malnutrition. (Modified journal abstract)

6390 **Morgan, R.W.** Boston University, African Studies Centre, Brookline, Mass. *Basic health needs in Africa.* Brookline, Mass., Boston University, African Studies Centre Working Paper No. 29, 1980. 34p. Engl. 42 refs.
Unpublished document.

Approached pragmatically, basic health needs in Africa can be defined in terms of the availability of medical services that are within the range of present technology and have been successfully implemented in several low income areas, with the expectation that these same services might be implemented in other, similar regions if the political, social, or cultural obstacles could be overcome. Needs so defined include immunization programmes, maternal child health services (including nutrition), primary care delivered by auxiliaries, and health education. Within this context, the author discusses African disease patterns, present medical systems with emphasis on traditional medicine, auxiliary recruitment and training, and political aspects. Examples are taken from Tanzania, Ghana, the Gambia, and francophone Africa. (DP-E)

6391 **Neumann, A.K., Carlson, D.M., Lourie, I.M., Prince, J.S.** *International health technology exchange; a multidirectional and multidiscipli-*

nary road. Royal Society of Health Journal (London), 99(3), Jun 1979, 114-119, 126. Engl. 23 refs.

Ten guidelines for international health technology exchange are outlined. These include emphasis on prevention, need for a multidisciplinary and integrated organizational approach, requirements for active community participation, need for paraprofessional personnel, training requirements, emphasis on health education, infrastructure development and programme management, evaluation, legislation authorizing health systems, and coordination and cooperation among assisting organizations. Two examples of health technology exchange—the Gondar Public Health College and Training Centre in Ethiopia and the Danfa Comprehensive Rural Health and Family Planning Project in Ghana—are examined and general issues in health technology exchange are discussed. (DP-E)

6392 **Nursing Journal of India, New Delhi.** *Some facts about health care—and a more effective approach*. Nursing Journal of India (New Delhi), 70(3), Mar 1979, 77-78. Engl.

This article reviews some of the health problems of the Third World and discusses the importance of community involvement in health planning. The community can help to identify problems, work out solutions, mobilize financial resources, and select and support community health workers. Some form of local administration is essential to ensure complete community participation. Financial resources and international aid are also considered. (DP-E)

6393 **Pines, J.M.** *Language of nutrition planning*. Food and Nutrition (Rome), 3(3), 1977, 19-21. Engl.

Multisectoral nutrition planning presents formidable bureaucratic, cultural, administrative, and political problems. Communication difficulties compound these problems, often to the point of discrediting nutrition planners and their objectives. If nutrition planning and implementation are to progress, common goals, an analytical framework, and a unified planning approach are essential. With an attitude of cooperation, specialists from all fields who are interested in nutrition can use the principles described in this article to develop the multisectoral effort required to attack nutrition problems successfully. (DP-E)

6394 **Piot, M.A.** *Planification et gestion sanitaires; instruments de coopération technique. (Health planning and management; instruments for technical cooperation)*. Sozial- und Präventivmedizin (Zurich, Switzerland), 24(2-3), May 1979, 127-131. Fren. 8 refs.

The epidemiological, economic, social, and technical realities of the developing countries demand an approach to health planning different from that of the Western, industrialized countries. Since 1970, WHO has been working on the development of a set of programming, project formulation, and management procedures that are broadly based on the systems approach. This paper outlines the procedures as they now stand, pointing out that further evolution of the methodology will be based on the experiences of member states in its application. (HC-L)

6395 **Player, D.** *Theme 1: public policy*. International Journal of Health Education (Geneva), 22(3), Jul-Sep 1979, 170-173. Engl.

Tenth International Conference on Health Education, London, UK, 2-7 Sep 1979.

Also published in French, German, and Spanish.

The 1st theme of the 10th International Conference on Health Education—public policy—comprised four subthemes: government attitudes, training policy, support and evaluation, and policy and public involvement. Because their influence on health education policies is obvious, politicians and government officials are a prime target for health educators. In addition, every health professional should also be trained as a health educator and the various health education research programmes supported and evaluated. The need to involve the public as much as possible is stressed. The discussions of this topic emphasized the interdependence of planning and action. (DP-E)

6396 **Sallam, A.M.** *Science and technology in planning: a health care system in developing countries*. n.p., n.d. 19p. Engl.

Symposium on Science and Technology in Development Planning, Mexico City, Mexico, 28 May-1 Jun, 1979.

Unpublished document.

The author outlines the main features of successful health planning policies for developing countries. He describes the general characteristics shared by all developing countries and traces their major disease problems. Health care systems should be simpler, more direct, and less centralized. National vaccination programmes and the provision of clean water should be key elements in any policy to improve health. All planning should be based on sound scientific thinking and on essential demographic and epidemiological information. Research into the health problems of developing countries should also receive high priority. In conclusion, the author calls for the establishment of an international fund to support such research. (FM)

6397 **Tarimo, E.** *Health and self-reliance: the experience of Tanzania*. Development Dialogue (Uppsala, Sweden), 1, 1978, 35-40. Engl.

In this paper, the author draws upon his experience as director in charge of the preventive division of the Ministry of Health in Tanzania to illustrate some of the priorities and issues in health care in developing countries (preventive medicine, appropriate technology, community participation, etc.), the meaning of Tanzania's policy of self-reliance, and problems related to the resistance of the conventional medical establishment to new ideas. (HC-L)

6398 **Tickner, V.** *New directions in food marketing policies in LDCs.* Food Policy (London), 3(4), 1978, 299-306. Engl.

In recent years, governments of developing countries have attempted to become more involved in the marketing of basic foods for local consumption. Unfortunately, their efforts have revealed weaknesses in the policies adopted, structures and approaches used, and support received from academic institutions and international organizations. This paper reviews recent work on the subject and calls for informed government intervention in the food marketing sector, national and international research into marketing systems, and greater stimulus for technical and training support on the part of international advisory bodies. (HC-L)

6399 **Vargas Tentori, F.** *Primary health care: a strategy for extending coverage to the unserved population.* Bulletin of the Pan American Health Organization (Washington, D.C.), 15(4), 1981, 354-360. Engl. 11 refs.

Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 90(1), 1981, 1-9.

Identifying a number of principal obstacles to extending health service coverage to deprived populations, the author examines a public health care strategy based on actions designed to overcome such obstacles and to provide alternatives and practical solutions suited to the characteristics of the countries, regions, and communities involved. Using simple, effective, low-cost actions for disease prevention and health restoration, this strategy stresses interdisciplinary and intersectoral approaches and emphasizes appropriate technology and community participation. It is important that both the health system and its support subsystems be flexible. New methods for local information gathering, programming, and health service organization must be tried. Several observations concerning the activities of the administration, planning, and programming subsystems, which sould be kept in mind when applying the primary health care strategy, are put forward. (EB)

6400 **Vianen, J.G.** Erasmus University, Centre for Development Planning, Rotterdam. *Health care and economic development.* Rotterdam, Netherlands, Erasmus University, Centre for Development Planning, Discussion Paper No. 22, August 1973. 25p. Engl.

Using data from the United Republic of Tanzania, a simplified mathematical model is constructed to quantify the main relations between health care and economic development. Such a model can be used to illustrate the economic effects of specific health care policies. Following the formulation of the model and description of the equations, two alternative health policies are analyzed. The 1st policy is aimed at maintaining the health care level *per capita* so that the health status of the population does not deteriorate. The 2nd calls for an improvement in health status. (FM)

6401 **Wendlassida, T.** *Incidences du Project de Développement Intégré du Liptako-Gourma sur l'ambiance milieu social-milieu naturel. (Effects of the Integrated Development Project for Liptako-Gourma on the natural and social environment).* Ouagadougou, Comité Permanent Interétats de Lutte contre la Sécheresse dans le Sahel, Feb 1976. 15p. Fren.

Unpublished document.

The author explores the possibly disruptive consequences of development projects planned for Liptako-Gourma, an area encompassing parts of Mali, Nigeria, and Upper Volta. After describing the essential ecological features of the region, he outlines the balance and interdependence that now exist between the natural and human environments. The main points of the proposed development plan are summarized, particularly those concerning the mining and agricultural sectors. While acknowledging the benefits of such projects under ideal conditions, the author emphasizes the drastic transformations that will take place in the environment and life-style. (FM)

6402 **Westinghouse Health Systems, Columbia, Md.** *National health planning in Jordan; phase two: health policy strategy; 6 November to 23 December 1976.* Columbia, Md., Westinghouse Health Systems, 3 Feb 1977. 1v.(various pagings). Engl.

This report of phase 2 of a study of Jordan's health care system (the report of phase 1 is included as an appendix) is expected to contribute to the formulation of a national health plan. Chapters 1 and 2 provide an introduction, describe the physical environment, and summarize information on health status, nutrition, water supply, and sanitation. Chapter 3 analyzes the present structure of the health care system, emphasizing the lack of coordination and planned development. Chapter 4 examines health manpower supply, demand, utilization, and training. Chapter 5 covers specific issues including maternal child health services, water supply, sanitation, and preventive services. The final chapter presents recommendations concerning the development of a coordinated national health policy guaranteeing broad distribution of and access to basic services. Many chapters contain statistical data. (FM)

6403 **WHO, Brazzaville.** *Social policy and health development in Africa; community health information and education.* Brazzaville, WHO, AFRO Technical Papers No. 16, 1979. 62p. Engl. Refs.

This report presents background papers and final reports of two sessions of the WHO Regional Committee for Africa. The 1st includes an introductory paper on social policy and health development in Africa, as well as an address on the need for a social revolution in public health. Working groups discussed the interrelationship of health and socioeconomic development and prepared a number of recommendations. The 2nd meeting was concerned with community health information and education and participants discussed the development of communication strategies, training programmes in health education, and the development of an institutional framework to coordinate all health information activities. (FM)

6404 **WHO, Geneva.** *Optimization of radiotherapy; report of a WHO meeting of investigators.* Geneva, WHO, WHO Technical Report Series No. 644, 1980. 89p. Engl.

This report provides guidelines for planning and implementing radiotherapy for cancer control, particularly in developing countries. An introductory chapter considers special problems related to cancer in developing countries and the organization of radiotherapy services. Chapter 3 describes basic equipment required, maintenance, and costs. Chapter 4 discusses biological response to radiotherapy and the development of methods to increase the radiosensitivity of tumours relative to that of normal tissues. Chapter 5 calls for the establishment of an international study of radiotherapy methods, including a data bank and a registry of treatment given. (FM)

6405 **WHO, Geneva.** *MCH priorities.* AFYA (Nairobi), 13, Jul-Aug 1979, 102-103, 105. Engl.
Reprinted from the WHO Director-General's report on maternal child health, 3 Apr 1979.

This paper lists and briefly discusses a number of major maternal and child health problems that could be prevented by the assiduous application of a number of specific, well-known technologies (family planning, tetanus immunization, etc.). It also points out other components of maternal and child health care (e.g., nutrition, accident prevention, etc.) that, because they require behavioural change, will take longer to realize. (HC-L)

6406 **World Federation of Public Health Associations, Halifax, N.S.** *Non-governmental organizations and primary health care.* Halifax, N.S., World Federation of Public Health Associations, 1978. 93p. Arabic, Chinese, Engl., Fren., Russ., and Span.
International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 Sep 1978.

The views of non-governmental organizations (NGOs) are presented in six language versions of this paper given at the Alma-Ata conference. In addition to describing the concern and involvement of NGOs with issues of health and development, it identifies the range of their commitment and what is needed to translate it into action. NGOs have particular contributions to make in the areas of understanding, national policy formation, collaboration and coordination, and programme implementation. (DP-E)

6407 **Wright, D.D.** *Recent rural health research.* Journal of Community Health (New York), 2(1), Fall 1976, 60-72. Engl. 85 refs.

Recent rural health research is examined in terms of needs and solutions. A definition of needs requires an evaluation of the social factors that affect the expectations and the behaviour of both the provider and the consumer. Three types of solutions should be considered: the appropriate utilization of manpower, including the efforts to influence physician location and specialty distribution, new health practitioners, and team approaches; the new technology for transportation and communication; and the organization of new delivery systems. Two areas of rural health research that need more attention are programme evaluation and financial planning. (Modified journal abstract)

6408 **Yotopoulos, P.A.** *Population problem and the development solution.* Food Research Institute Studies (Stanford, Cal.), 16(1), 1977, 1-131. Engl. 234 refs.

The proposition that economic development and population growth are interdependent is almost self-evident, but traditionally the tendency has been to consider either factor within the narrow confines of its own scientific discipline while treating the other as a restraint. This book examines various aspects of the relationship between these two factors. Separate chapters cover the demographic and economic variables, economic and other determinants of population growth, agriculture-specific aspects of economic-demographic interactions, population growth and agricultural employment, and agricultural restraints on population growth. Statistical data are included. (DP-E)

II.4 Geographical Distribution of Health Services and Workers

See also: 6357, 6653.

6409 **Chaturachinda, K.** *Rural health care: challenges and prospect.* Journal of the Medical Association of Thailand (Bangkok), 61(7), Jul 1978, 415-418. Engl. 22 refs.

The author discusses the failure of the Western system of medical education to train physicians who can or wish to practice in Thailand and points out that his nation ranked second only to the Philippines in contributing foreign physicians to the US health care system. Attempts to resolve this situation have included reorientation of the medical school curriculum, contributions to the crown prince's fund for building rural hospitals, and US legislation that discourages the emigration of foreign doctors. Further suggestions for improving rural health care are made. (DP-E)

6410 **Goyal, S.K., Yadav, J.P.** *Allocation of doctors to health centres in Haryana state of India—a case study.* Journal of the Operational Research Society of America (Baltimore, Md.), 30(5), 1979, 427-431. Engl.

The number of doctors allotted to Harayana state's (India) 89 primary health centres is almost the same, regardless of whether the centre serves a population of 40 000 or 150 000. A mathematical model has been formulated and a heuristic method has been suggested for maximizing the expected number of patients seen by doctors employed by the health services. This paper describes the model and method and demonstrates its application on a random sample of nine health centres. (HC-L)

6411 **Kibbe, D.** *Issues in physician recruitment to rural areas.* Journal of the Maine Medical Association (Brunswick, Me.), 70(7), Jul 1979, 268-270. Engl.

This discussion of factors influencing physician distribution in the USA stresses that a principal reason given by doctors for refusing to practice in rural areas is a lack of professional associations and support. Rather than implementing costly programmes intended to make rural life more satisfying to physicians who are already prejudiced against it, the author suggests that a better approach would be basic reforms in medical education aimed at preparing medical students for the more independent professional life-style needed for rural practice and preventing the anti-rural conditioning process presently taking place in medical schools. (DP-E)

6412 **Kirsch, M.H.** *Innovative, rational approach to rural health care.* Medical Hypotheses (Newcastle-upon-Tyne, UK), 4(4), 1978, 362-366. Engl.

To attract physicians to or near medically underserved rural areas in southern Illinois (USA), it is proposed that primary care and referral centres be set up by adding well-trained general practitioners, family physicians, or general internists to the staff of each emergency centre of the Total Emergency Medical Service System for these areas. These additional physicians would diagnose and treat within their capabilities all non-emergency cases coming to the primary care centres and refer non-emergency cases needing secondary or tertiary care. The Primary Care and Referral Centres should be self-supporting from prepaid patient fees. For almost 10 years, a health centre similar to this model has been operating at Southern Illinois University at Edwardsville. (Modified journal abstract)

6413 **Mullan, F.** *National Health Service Corps.* Lancet (London), 1(8125), 19 May 1979, 1071-1073. Engl.

The National Health Service Corps (NHSC) was established by the US Public Health Service (PHS) in 1970 to meet the needs of underserved civilian populations. Although the PHS has a long history of health services delivery to statutorily designated populations (American Indians, federal prisoners, etc.), this was the 1st time that federally employed physicians were to provide complete medical services to the general population. Most of these physicians are recipients of NHSC scholarships, which carry with them a year-for-year service obligation. The history, present, and future of the NHSC are briefly discussed. (DP-E)

6414 **Roemer, M.I.** *Strategies for increasing rural medical manpower in five industrialized countries.* Public Health Reports (Rockville, Md.), 93(2), Mar-Apr 1978, 142-146. Engl.

A study of the health care systems of Australia, Belgium, Canada, Norway, and Poland identified six general policies that influence the distribution of medical manpower in both rural and urban areas: the existence of a national health insurance scheme, a large overall supply of health manpower, a nationally-organized system of health care delivery, the concept of regionalization, a national movement to strengthen medical practice, and the operation of information systems to help physicians seeking employment. Special strategies aimed particularly at rural areas, such as compulsory rural service, limiting the immigration of foreign physicians, transport services, expanded roles for nurses, etc., are also discussed. (DP-E)

II.5 Financial Aspects

See also: 6773.

6415 **Barnum, H., Barlow, R., Fajardo, L., Pradilla, A.** *Outline of a project to analyse the cost-effectiveness of health interventions to reduce child mortality.* Courrier (Paris), 29(4), 1979, 340-344. Engl.

This paper gives a verbal description of a mathematical optimization model designed to provide policy-makers with an analytical framework that will facilitate the efficient allocation of resources to programmes intended to reduce child mortality. Features of the model include the use of interactive simultaneous equations to model the causes of death in a setting of multiple diseases, the clear distinction between preventive activities affecting morbidity and curative activities affecting case fatality, and the separation of the early childhood period into age subgroups with distinct morbidity characteristics. The model also distinguishes between programme usage (demand) and programme availability (supply) and sets intervention levels that will equilibrate the two. A total of 234 parameters need to be specified before the model can be applied and a set of survey questions has been designed specifically for that purpose. A copy of the survey frames in English or Spanish can be obtained by writing to the authors. (HC-L)

6416 **Mach, E.P.** *From health policy to economic action; financing, a suitable tool to adapt health programmes to national priorities.* Sozial- und Präventivmedizin (Zurich, Switzerland), 24(2-3), May 1979, 132-136. Engl. 11 refs.

Many developing countries are hampered in their efforts to reorient their health plans to play a more purposeful role in national development by such obstacles as a shortage of funds, maldistribution of resources, poor coordination, and inefficiencies in spending. This paper discusses selected aspects of these problems, makes some suggestions for their alleviation, and strongly advocates that countries undertake periodic surveys of financing and resource allocation in the health sector for programming and evaluation purposes. (HC-L)

6417 **Rodrigues, O., Rodrigues, A.M.** *Agricultural credit related to nutrition and national development in the Caribbean: a study of the Guyana Agricultural Cooperative Development Bank.* Tropical Agriculture (Guildford, UK), 56(1), Jan 1979, 1-9. Engl.

The pattern of loans granted by the Guyana Agricultural Cooperative Development Bank was analyzed for nutrition and national development implications. Results suggest that traditional banking criteria were applied to the general disadvantage of the most needy groups. This is viewed in the context of evidence from other countries that suggests that welfare objectives need not conflict with the goal of increased production. An integrated approach to regional development is seen as indispensable. This would permit a change in the lending pattern to one that might benefit small farmers who are also most at-risk of malnutrition. Statistical data are included. (Modified Journal abstract)

6418 **Satow, S.** *Village hospital in a changing world.* Indian Journal of Surgery (Bombay, India), 39(8), Aug 1977, 377-379. Engl.

In the face of rising costs and the relatively fixed economy of a rural Indian hospital where patient care costs compared to those of the West are extremely low, one of the ways in which costs can be kept down is to recycle disposable materials such as scalpel blades, needles, rubber gloves, catheters, infusion sets, blood administration sets, etc. It is necessary to determine how many times these materials can be safely used and this paper attempts to clarify ways in which materials can be recycled. (DP-E)

6419 **Zschock, D.K.** *Health care financing in developing countries.* Washington, D.C., American Public Health Association, International Health Programs, Monograph Series No. 1, 1979. 82p. Engl. 82 refs.

This overview of the basic issues related to health care financing treats, in terms easily understood by the non-economist, the following: the definition of health care and the determinants of the demand for it; the major sources of health care financing, both public and private; ways of determining how much financial support should be allocated to the health sector and what sources of financing should support which aims; and case studies of health care financing in Colombia, South Korea, Bolivia, the Dominican Republic, Botswana, and the People's Republic of China. It is concluded that significant increases in financial support, linked with major changes in the technology of health care delivery, are needed to meet the basic health needs of many developing countries. (HC-L)

II.6 Cultural Aspects

See also: 6322, 6341, 6601.

6420 **Ashcroft, M.T.** *Some non-infective diseases endemic in the West Indies.* Cajanus (Kingston, Jamaica), 12(3), 1979, 155-164. Engl. 34 refs.

Some unusual diseases unique to the West Indies are described. The vomiting sickness of Jamaica is essentially food poisoning caused by eating unripe ackees. Jamaica's veno-occlusive disease, commonly known as swell-belly, is also caused by food poisoning, this time by herbal teas made from *Crotalaria fulva*; the incidence of this disease has recently fallen due to the efforts of health educators to discourage the consumption of this plant. It is theorized that tropical sprue, which is endemic in Puerto Rico but rare in other Caribbean countries, is also related to diet, specifically to reheated pork fat, although the exact aetiology of the disease has yet to be determined. (DP-E)

6421 **Burrow, G.N., Hopkins, J., Dhonden, Y., Dolma, L.** *Goiter in Tibetan medicine.* Yale Journal of Biology and Medicine (New Haven, Conn.), 51(4), Jul-Aug 1978, 441-447. Engl. 16 refs.

A brief outline of the history and religious background of Tibetan traditional medicine reveals that all illness is produced by causes, such as an imbalance of body humours, and conditions (season, evil spirits, diet, Karma, or behaviour). The eight types of goitre known to Tibetan medicine are discussed and their Western equivalents given. Although it is not known if iodine is part of traditional treatment, allopathic control measures include diet, herbal medicines, and mechanical manipulation. While Tibetan methods may not be the most effective according to Western standards, the traditional practitioner also provides essential emotional support. (DP-E)

6422 **Carstairs, G.M.** *Protective elements in traditional cultures.* Journal of Psychosomatic Research (London), 21(4), 1977, 307-312. Engl.

This survey of psychiatric symptom prevalence in rural Indian villages illustrates the consequences of losing an important element in a long-established social support system. In the two villages that were in the process of changing from a matrilineal system of inheritance and family residence to a patrilineal one (always at the insistence of the men), symptom rates were significantly lower among women who adhered to the old pattern with its traditional forms of social support. (DP-E)

6423 **Chen, P.C.** *Traditional and modern medicine in Malaysia.* American Journal of Chinese Medicine (Garden City, N.Y.), 7(3), Autumn 1979, 259-275. Engl. 42 refs.

Malaysia has a large variety of traditional medical systems that are a direct reflection of the wide ethnic diversity of its population. These can be grouped into four basic varieties: traditional "native," traditional Chinese, traditional Indian, and modern medicine, examples of which are given. In spite of the great inroads made by modern medicine, the traditional systems are firmly established. Patients move from one system to another or use several simultaneously. The integration of the traditional Malay birth attendant into the health team is described and the forces influencing the development, acceptance, and integration of different systems are examined. (Modified journal abstract)

6424 **Edeh, J.** *Co-operation between a psychiatrist and an African native healer; an illustrative case.* East African Medical Journal (Nairobi), 55(12), Dec 1978, 599-601. Engl. 9 refs.

A case of puerperal psychosis treated by both a psychiatrist and a Nigerian traditional healer is presented. The mechanism of the indigenous healing method is discussed. The author believes that traditional and Western medicine can be combined to provide an effective health care delivery system in Africa and stresses the integration of these two systems, particularly in psychiatric care. (Modified journal abstract)

6425 **Fakunle, Y.M., Ajagbonna, S.O., Ani, O.E., Awofeso, O.** *Diarrhoea, constipation and intestinal transit in a northern Nigerian population.* Journal of Tropical Medicine and Hygiene (London), 81(7), Jul 1978, 137-138. Engl.

Healthy Nigerians from Zaria have a short intestinal transit time. It is usual for them to open their bowels daily and their concept of diarrhea and constipation differs widely from standard medical definitions. To avoid confusion, care must be taken to inquire exactly what patients mean when they present with these symptoms. Statistical data are included. (Modified journal abstract)

6426 **Gumede, M.V.** *Traditional Zulu practitioners and obstetric medicine.* South African Medical Journal (Cape Town), 53(21), 27 May 1978, 823-825. Engl.

This article discusses traditional Zulu attitudes toward the community, childbearing, sterility and impotence, adolescent girls, virginity and marriage, pregnancy, parturition, and infant care. The author states that it is obvious from these traditions and their related practices that the Zulu community has a good understanding of the basic principles of gestation, confinement, and infant care; the tribe also had trained midwives who could even perform such complicated manoeuvres as internal inversions and placenta extractions. (DP-E)

6427 **Gupta, S.** *Psychological factors in health planning.* Indian Pediatrics (Calcutta, India), 16(1), Jan 1979, 1-2. Engl.

The author emphasizes the need to consider sociocultural factors in health planning because of the difficulties involved in persuading people to change their habits and traditional ways of doing things. The best means of introducing change is by health education, especially of women, since there is a direct correlation between the mother's education and the health of her family. Physicians and other Western-trained health workers are urged to abandon their elitist position and begin cooperating with traditional practitioners to bring about better health for all. (DP-E)

6428 **Imperato, P.J.** *Traditional medical beliefs in Africa and their influence on the success of public health programs.* Courrier (Paris), 28(4), 1978, 339-344. Engl. Refs.

Traditional African medical beliefs and practices have considerable effect on how people conceive modern public health programmes, which may be considered irrelevant or, at worst, nefarious. Local attitudes may also be influenced by previous exposure to health services. Public health officials must have an understanding of indigenous medical beliefs in order to plan effective and acceptable health programmes. Health measures with a rapid and dramatic effect, such as measles immunization, often help to make other, less visible measures more acceptable. Traditional practitioners and remedies should also be incorporated, when practicable, into the system. (Modified journal abstract)

6429 **Latif, A.** *Traditional Chinese medicine.* Journal of the Pakistan Medical Association (Karachi), 29(2), Feb 1979, 41-43. Engl.

A Pakistani visitor to the People's Republic of China describes the utilization of Western and traditional medicine that he observed there. Of particular interest to Pakistan were the following: the Institute of Traditional Materia Medica, Peking, where research into indigenous drugs is conducted (Pakistan has no comparable institution); and the fact that hospitals and health facilities produce their own pharmaceuticals on site rather than depend on expensive imports. (HC-L)

6430 **Pataki-Schweizer, K.J., Tabua, T.W.** *Psychosomatics of venereal disease: toward a programme for the 1980s.* Papua New Guinea Medical Journal (Port Moresby, Papua New Guinea), 23(1), Mar 1980, 46-50. Engl. 16 refs.

To be effective, Papua New Guinea's venereal disease programme must take into account not only the epidemiology of sexually transmitted diseases but also the psychological factors contributing to their spread. The programme should combine: accurate epidemiology data; awareness of traditional attitudes towards sex and witchcraft; realism about present-day behaviour, regardless of professional, religious, or traditional attitudes; sensitivity to the community milieu; psychological condition of the individual; suitable communication, usually by health education; and contact-tracing. Statistical data are included. (DP-E)

6431 **Pillsbury, B.L.** *Reaching the rural poor: indigenous health practitioners are there already.* Washington, D.C., Agency for International Development, Bureau for Program and Policy Coordination, Office of Evaluation, A.I.D. Program Evaluation Discussion Paper No. 1, Mar 1979. 55p. Engl. Refs.

US AID's Office of Evaluation aims, on the basis of existing data on field experience, to provide US AID management with usable analyses of the intended and unintended impact of US AID activities. This monograph discusses the role, importance, and kinds of indigenous practitioners encountered in rural areas of developing countries, describes ways in which US AID has been involved with indigenous practitioners to date, and points out some policy and programme options relative to indigenous practitioners for use in US AID-sponsored activities. (HC-L)

6432 **Price, J., Karim, I.** *Matiruku, a Fijian madness; an initial assessment.* British Journal of Psychiatry (London), 133(9), 1978, 219-225. Engl. 8 refs.

In Fijian, *matiruku* means literally "low tide in the morning" and refers figuratively to somebody who is periodically insane. In this study, the conceptual basis of *matiruku* was examined by means of a questionnaire completed by 24 Fijians that explored its occurrence, aetiology and precipitation, phenomenology, management, and prognosis. It was concluded that *matiruku* corresponds to hypomania, which may have special features in Fiji: short duration, frequent recurrence, and an intensification of symptoms in the morning. (Modified journal abstract)

6433 **Ree, G.H.** *Psychosomatics of leprosy.* Papua New Guinea Medical Journal (Port Moresby, Papua New Guinea), 23(1), Mar 1980, 41-45. Engl. 29 refs.

Some of the psychological reactions and attitudes to leprosy are examined, with examples from Papua New Guinea. These include: the religious and linguistic connotations of the word; social reactions towards and of lepers, such as isolation; the reluctance of health workers, who often experience the same social reactions, to treat lepers; attitudes towards deformities, especially of the genitalia, which may be grounds for prohibiting or dissolving marriage; and defaulting from treatment and rehabilitation procedures. Health education is recommended as the best solution to these problems. (DP-E)

6434 **Said, H.M.** *Present state of traditional medicine in Pakistan and its future.* Hamdard National Foundation (Karachi), 22(1-6), Jan-Mar 1979, 104-106. Engl.

CENTO Seminar on Traditional Medicine, Karachi, Pakistan, 21-23 Oct 1978.

This article contains the text of a paper presented at the CENTO Seminar on Traditional Medicine; lists of the organizations in Pakistan that use traditional medicine, current syllabi being used at institutions of traditional medicine, and the recommendations of the CENTO seminar are annexed. This paper on the present and future of traditional medicine in Pakistan covers such aspects as traditional medicine institutes, rural and urban health, hospitals, pharmacy and medicinal plants, and research. Resolutions for integrating traditional and Western medicine are discussed. (DP-E)

6435 **Sipila, H.** *Women, health and human rights.* World Health (Geneva), Jul 1979, 6-9. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Equality of men and women, women's full involvement in the development of society, and their increasing contributions towards strengthening world peace are the theme of the UN Decade for Women (1976-1985). It is recognized that women have special health needs and problems, because cultural pressures may force them to bear large numbers of children and economic pressures may aggravate malnutrition and lead to overwork. Therefore, UN member states are called upon to provide antenatal, postnatal, and delivery services and gynaecological and family planning services during a women's productive years in addition to offering her general health and nutrition services. (DP-E)

6436 **Sterly, J.** *Öffentliches Gesundheitswesen und traditionelle Medizin in Papua New Guinea. (Public health service and traditional medicine in Papua New Guinea).* Öffentliches Gesundheitswesen (Stuttgart, Germany FR), 41(6), Jun 1979, 336-379. German. 20 refs.

Antrittsvorlesung über Medizinanthropologie, Cologne, Germany FR, 13 Jan 1977.

This paper briefly reviews the cultural history, economy, and politics of Papua New Guinea, with emphasis on the impact of social change on the epidemiological situation. It then describes public health organization and institutions, including their achievements and limitations, and traditional medicine as it is still being practiced today. (Modified journal abstract)

6437 **Swantz, M.L.** *Community and healing among the Zaramo in Tanzania.* Social Science and Medicine (Oxford, UK), 13B(3), Sep 1979, 169-173. Engl. 11 refs.

The Zaramo of Tanzania have traditionally interpreted illness in terms of social distrust and sought ritual forms of healing that require communal participation of kin and neighbourhood groups. Comparison of the practices of rural and urban traditional Zaramo healers reveals a tendency for the latter to attribute illness to sorcery and to resort to individualized treatment—a tendency that both reflects and perpetuates a social situation fraught with mutual suspicion and in which there is little room for communal action. The implications of this finding for the establishment of community health services, especially in the *ujamaa* villages, are briefly discussed. (HC-L)

6438 **WHO, Geneva.** *Promotion and development of traditional medicine.* Geneva, WHO, WHO Technical Report Series No. 622, 1978. 41p. Engl.

This WHO meeting assembled representatives of the major systems of traditional medicine to work together and suggest a plan of action to promote and develop various aspects of traditional medicine, including policy guidelines for the provision of materials and techniques, collaboration among different systems of health care, health education of the public, manpower development, organization of health services, the future development of traditional medicine and its utilization in national health services, and relevant research. Examples from various countries are given. A major problem discussed was the collaboration of different practitioners and their integration into a national health care delivery system. (DP-E)

II.7 Epidemiological, Family Planning, Maternal Child Health, Nutrition, and Disease Control Studies

See also: 6305, 6355, 6362, 6388, 6393, 6398, 6436, 6595, 6665, 6685, 6689, 6694, 6798, 6813, 6909, 6949

6439 **African Medical and Research Foundation, Nairobi.** *How to recognize dehydration.* AFYA (Nairobi), 15, Jan-Mar 1981, 19-22. Engl. Originally published in Diarrhea Dialogue, Aug 1980.

This article lists the important signs and symptoms of diarrhea. Since diarrhea kills by causing dehydration, children suffering from diarrhea should be encouraged to drink. In severe cases, oral rehydration fluid should be given and the child taken to a centre where special care is available. (DP-E)

6440 **Agarwal, A.** *Cure for a killer—but how to deliver it?* Nature (London), 278(5703), 29 Mar 1979, 389-391. Engl.

Because of its proven efficiency and cost-effectiveness in treating diarrhea, WHO and UNICEF are spearheading an international campaign to persuade Third World governments to integrate oral rehydration into primary care activities. WHO believes that the best method of delivering this treatment is by means of prepackaged ingredients to be distributed, and sometimes produced, in developing countries. Critics of this idea, however, advocate alternate approaches such as a salt and sugar solution prepared in the home by the mothers of sick children, possibly with the help of a specially designed spoon. Other problems involved in the introduction of oral rehydration therapy are discussed. (DP-E)

6441 **Alencar, J.E. de, Mendonça de Almeida, Y., Rodrigues Santos, A., Miranda Freitas, L.** *Epidemiology of Chagas' disease in the state of Ceara, Brazil; IV—the role of dogs and cats as domestic reservoir.* Revista Brasileira de Malariologia e Doenças Tropicais (Rio de Janiero, Brazil), (26-27), 1974-1975, 5-26. Engl.

A series of epidemiological surveys to assess the prevalence of trypanosomiasis in 1 001 domestic animals near Russas, Brazil, revealed an infestation rate of 14.7% among dogs (99 in 674) and 24.3% among cats (65 in 278) but no signs of the disease in other types of animals examined. The survey methodology and the implications of these results for human infection are discussed. Maps and statistical data are included. (DP-E)

6442 **American Academy of Pediatrics, Committee on Nutrition, Evanston, Ill.** *Nutritional needs of low-birth-weight infants.* Pediatrics (Springfield, Ill.), 60(4), 1977, 519-530. Engl. 111 refs.

The optimal diet for the low-birth-weight infant may be defined as one that supports a rate of growth approximating that of the 3rd trimester of intrauterine life without imposing stress on the developing metabolic or excretory systems. This paper reviews current opinion and practices regarding: the caloric, protein, vitamin, and mineral requirements of low-birth-weight babies; alternate feeding procedures (e.g., nasogastric drip, intravenous feeding, etc.); and recommended formula compositions for normal and low-birth-weight babies, including recent recommendations of the American Academy of Pediatrics' Committee on Nutrition for proposed standards for infant formula. (HC-L)

6443 **André, L.J., Sirol, J., le Vourch, C., Labegorre, J., Cochevelou, D.** *Kala-azar soudanais en Afrique de l'Ouest. (Sudanese* kala azar *in West Africa).* Médecine Tropicale (Marseilles, France), 38(4), Jul-Aug 1978, 435-442. Fren. 12 refs.

The authors present a detailed report of a case of visceral and cutaneous leishmaniasis in a European boy living in the Upper Volta, the 1st case of visceral leishmaniasis in the region, which is a recognized area of the cutaneous form of the disease. The roles of personal susceptibility, environment, and arthropod vectors are discussed. It is suggested that this is a specific parasite adapted to its vector and principal vertebrate reservoir. In each given area, a special form of leishmania exists, related to local vectors and giving various clinical forms. (Modified journal abstract)

6444 **Araujo, D.F. de** *Imunizações em pediatria. (Immunizations in children).* Jornal de Pediatria (Rio de Janeiro, Brazil), 45(4), Oct 1978, 270-276. Portuguese.

This paper reviews the Brazilian immunization schedule, describing the nature of each vaccine, its preservation, its packaging (e.g., as singular or multiple doses), and its method of application. Some suggestions for improving the schedule, such as simultaneous administration of a number of vaccines, reducing the interval between doses, etc., and some contraindications to vaccination, are presented. (HC-L)

6445 **Arcoverde de Freitas, C.** *Prevalência do tracoma no Brasil. (Prevalence of trachoma in Brazil).* Revista Brasileira de Malariologia e Doenças Tropicais (Rio de Janeiro, Brazil), 28(1-4), 1976, 227-250. Portuguese. 9 refs.

This paper describes the origins and prevalence of trachoma in Brazil and outlines the activities of the federal trachoma campaign from 1956-1974. It then presents the methodology and results of a survey of 370 659 schoolchildren from 383 counties deemed representative of the various micro-regions of the country. Comparison of the survey results with earlier data shows that, while trachoma is definitely on the decline, certain foci of infection remain—e.g., 15 counties with prevalence rates above 30%. It is suggested that the mass campaign approach be continued in such areas but that, in areas with prevalence rates of less than 10%, trachoma control be integrated with the general health services. Tables of data, maps, samples of formulae used in the survey, etc., are included. (HC-L)

6446 **Axton, J.H.** *Measles and the state of nutrition.* South African Medical Journal (Cape Town), 55(4), 27 Jan 1979, 125-126. Engl. 28 refs.

The severity of an attack of measles is largely determined by the underlying state of nutrition at the time of the attack. Evidence is presented that suggests that, conversely, measles may be responsible for the precipitation of malnutrition in undernourished children by a combination of several different mechanisms. The main reason is that a diet that may have been adequate to maintain growth in a child before the illness is afterwards inadequate due to the increased nutritional needs of the recovery period to replace damaged tissues and protein losses. (DP-E)

6447 **Basson, W., Page, M.L., Myburgh, D.P.** *Human trypanosomiasis in southern Africa.* South African Medical Journal (Cape Town), 51(14), 2 Apr 1977, 453-457. Engl. 15 refs.

Five case histories of trypanosomiasis, all of which occurred in young men in the South African army, are recounted and discussed to illustrate some of the problems associated with the diagnosis and management of this disease. (HC-L)

6448 **Baugh, S.C.** *Century of schistosomiasis in India: human and animal.* Revista Ibérica de Parasitología (Madrid), 38(1-2), 1978, 435-472. Engl. 123 refs.

This article reviews research carried out in India on both human and animal schistosomiasis from 1878-1978. A number of case histories are included. (DP-E)

6449 **Bernard, R.P., Kendall, E., Peng, J.Y., Kessel, E.** Regional Organization for Inter Governmental Cooperation and Coordination in Population and Family Planning in Southeast Asia, Inter Governmental Coordinating Committee, Kuala Lumpur. *Maternity care monitoring (MCM): where next?* Kuala Lumpur, IGCC Secretariat, n.d. 24p. Engl.
IGCC/FRP East and South East Asia Seminar on Regional Fertility Research, Bangkok, Thailand, 18-20 Jul 1979.

The findings of maternity record studies in maternity centres in both developing and developed countries indicate important gaps in service delivery and the need to develop standards for maternity care that are country-specific. The concept of maternity care monitoring (MCM) is presented as a continuous process of improving maternity services, especially in peripheral centres staffed by midwives or traditional birth attendants, by involving their providers in the collection and evaluation of local information. A pyramid structure to conceptualize the need and strategies for implementing MCM using computerized record systems are discussed and recommendations made to extend MCM coverage to include all aspects of maternal child health. Statistical data are included. (Modified journal abstract)

6450 **Bland, J.** *Young eyes at risk.* World Health (Geneva), Aug-Sep 1979, 33-35. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Vitamin A deficiency is a leading cause of childhood blindness in developing countries, affecting 100 000 children annually, yet it is easily preventable at little cost. With an effective distribution network in rural areas, capsules of vitamin A that cost only US$0.15 can be handed out twice a year. Countries that have introduced such mass campaigns report a significant decrease in eye lesions. Other preventive measures include fortifying foods such as milk and tea with vitamin A and encouraging consumption of fruits and vegetables containing the vitamin. (FM)

6451 **Brink, E.W., Nakano, J.H.** *Naturally acquired measles immunity in Nepal and Sri Lanka.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(3), Sep 1978, 109-113. Engl.

Serological surveys of naturally acquired measles antibodies in children aged 6-72 months were carried out in 219 villages in Nepal and 450 in Sri Lanka. Because 50% of rural Nepalese children have acquired natural measles immunity by the age of 28 months, measles vaccination programmes should be designed mainly for children aged 9-28 months. In Sri Lanka, where 40% of the children are immune at age 36 months, immunization programmes should cover those aged 9-36 months. Differences of measles epidemiology in the two countries are discussed. Statistical data are included. (DP-E)

6452 **Brooke, O.G.** *Infant feeding: the perennial problem.* Practitioner (London), 222(1323), Sep 1978, 314-319. Engl. 27 refs.

This paper reviews new advances in nutritional knowledge about human milk, particularly the qualitative ways in which it differs from cows' milk, and discusses some topical concerns related to early breast-feeding (jaundice), later breast-feeding (insufficient milk production), bottle-feeding (hypocalcaemia, hyperosmolar dehydration, obesity, infection, and allergy), and weaning (toddler diarrhea). (HC-L)

6453 **Brown, R.E.** *Weaning foods in developing countries.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(11), Nov 1978, 2066-2072. Engl. 18 refs.

Factors affecting infant weaning and weaning foods in developing countries are discussed, including cultural influences, methods of preparation, contamination, the use of manufactured foods, and nutritional content. Although breast-feeding should be continued as long as possible, malnourished mothers may not produce adequate milk, so that, in some cases, solid foods should be introduced earlier than the age of 6 months (the recommended age for Western children). Locally prepared mixes using local products are always preferable and health and nutrition education are essential components of any developing country nutrition programme. (DP-E)

6454 **Causse, G.Y.** *Surveillance des maladies transmises par voie sexuelle; approche pratique. (Surveillance of sexually transmitted diseases; practical approach).* Revue d'Epidémiologie, Médecine Sociale et Santé Publique (Paris), 25(5-6), 1977, 407-426. Fren. 32 refs.

The author examines and evaluates a number of methods for determining the incidence of sexually transmitted diseases in a given population. Periodic samplings of cases diagnosed by general practitioners and in laboratories or hospitals can provide valuable information on the distribution of venereal diseases according to age, sex, and social group. Surveillance can also be done in medical facilities such as gynaecology and obstetric centres or family planning and prenatal clinics. Another important method is the systematic examination of selected groups of women, particularly high-risk groups such as those aged less than 30 years, single or separated, or of low socioeconomic status. (FM)

6455 **Chowdhury, A.K., Chen, L.C.** *Interaction of nutrition, infection, and mortality during recent food crises in Bangladesh.* Food Research Institute Studies (Stanford, Cal.), 16(2), 1977, 47-61. Engl. 24 refs.

Eighteenth General Conference of the International Union for the Scientific Study of Population, Mexico City, Mexico, 8-13 Aug 1977.

This paper presents data on the demographic impact of two Bangladesh famines (1971 and 1974) with emphasis on the resulting fluctuations in births, deaths, and migrations. From this data, an analytical framework delineating the multiple, interacting causes of famine is constructed. This framework postulates that several mutually-reinforcing vicious cycles, between infection and malnutrition and the three abovementioned demographic variables, contribute to the impact of acute nutritional crises. The implications of these findings for preventive and remedial interventions are discussed. (DP-E)

6456 **Currey, B.** *Famine syndrome: its definition for relief and rehabilitation in Bangladesh.* Ecology of Food and Nutrition (London), 7(2), 1978, 87-98. Engl.

The present definition of famine, which emphasizes epidemic malnutrition and starvation deaths, should be expanded to include the broader spectrum of earlier symptoms. An example from Dacca confirms the presently accepted definition, but a 2nd example from a famine-affected area of rural Bangladesh illustrates the potential of monitoring earlier indicators. Concurrent with the change in emphasis in defining famine will come the move from belated doles of food relief towards prevention and rehabilitation through rural development. Statistical data are included. (Modified journal abstract)

6457 **Dedet, J.P.** *Leishmanioses en Afrique du Nord. (Leishmaniasis in North Africa).* Bulletin de l'Institut Pasteur (Paris), 77(1), Jan 1979, 49-82. Fren. 86 refs.

Based on bibliographic research, personal experience in Algeria and Tunisia, and recent hospital statistics, this paper studies the prevalence and distribution of leishmaniasis in the Maghreb (Algeria, Morocco, and Tunisia). The biographical, epidemiological, clinical, and biological aspects of the two manifestations of the disease (visceral and cutaneous) are considered separately. (HC-L)

6458 **Deosthale, Y.G.** *Nutritive value of Indian foods: some recent studies.* Indian Journal of Medical Research (New Delhi), 68(10), Oct 1978, Suppl., 1-16. Engl. 54 refs.

The results of recent Indian research studies of the nutritive value of the newer varieties of different cereals, millets, and pulses are reported. The protein control and quality of rice, wheat, pearl millet (*barja*), sorghum, and grain legumes (pulses) are examined and the trace element composition of foods is discussed. The nutritive value of some less familiar and unconventional food sources, such as winged beans, are considered. Statistical data are included. (DP-E)

6459 **Eichenlaub, D., Reimann, E., Bunjes, R.** *Malaria tertiana bei Kindern und Erwachsenen aus dem Epidemiegebiet der südlichen Türkei. (Tertian malaria in children and adults from an epidemic region in southern Turkey).* Deutsche Medizinische Wochenschrift (Stuttgart, Germany FR), 104(8), 1979, 288-292. German. 21 refs.

Since 1974, the incidence of tertian malaria has reached epidemic proportions in southern Turkey, with a peak incidence of 115 500 cases in 1977. A further increase is to be expected, because the vectors have become resistant to insecticides. Since 1975, 11 children and 3 adults in Berlin (Germany) have been treated for *Plasmodium vivax* malaria. They had all stayed in the epidemic area during the transmission season, which lasts from July to October. Because of a long primary latent period, 7 patients only developed the 1st manifestations of the disease 6-9 months after leaving Turkey. Tetracyclines and trimethoprim-sulphamethoxazole were able to suppress the disease without preventing relapses. Statistical data are included. (Modified journal abstract)

6460 **Fadahunsi, O.** *Congenital rubella syndrome in Lagos.* Nigerian Journal of Paediatrics (Ibadan), 5(1), 1978, 4-11. Engl. 22 refs.

Over a 2-year period, 17 cases of congenital rubella syndrome were found among 190 children with congenital heart disease attending the Pediatrics Clinic, Lagos Teaching Hospital, Nigeria. This paper describes and discusses the clinical features of the 17 cases, the parity of the mothers, the birth order of the patients, and congenital malformations and disorders associated with the condition. It is suggested that, in view of the high incidence of the syndrome, all sero-negative adolescent girls be vaccinated against rubella. Statistical data are included. (HC-L)

6461 **Farwell, A.E. ed(s).** American Public Health Association, Washington, D.C. USA, Agency for International Development, Department of State. *Minutes of Washington Workshop, Bureau for Africa, Antimalaria Support Strategy Study, December 4-7, 1979.* Washington, D.C., American Public Health Association, International Health Programs, 1979. 1v.(various pagings). Engl.
Workshop on African Anti-Malaria Support Strategy, Washington, D.C., 4-7 Dec 1979.

Background papers, proceedings, and annexes comprise the minutes of this workshop for 22 malaria experts and senior officials of US AID and the American Public Health Association, convened for the purpose of devising a malaria control strategy for Africa. Papers presented cover the role of foreign aid, present malaria control programmes, study group reports, and the influence of social, cultural, and political factors on disease control planning. Annexes include policy statements and lists of participants and resources. (DP-E)

6462 **Faulk, W.P., Path, M.R., Edsall, G.** *Vaccines and vaccination programs—special emphasis in malnutrition.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(12), Dec 1978, 2237-2247. Engl. 85 refs.

The relationship between nutrition and infection is examined in this study of the consequences of immunization programmes in malnourished populations. Topics covered include immunological capabilities in malnutrition, vaccines and vaccination programmes, and basic concepts of vaccination (immune response, mode of administration, results, etc.). Efforts should be made to compensate for the effects of malnutrition on the type of vaccination being used. (DP-E)

6463 **Fortin, J., Montaceur, Z., Saied, F.** *Méthodologie d'approche d'un problème de santé publique; les diarrhées aiguës du nourrisson. (Methodological approach to a public health problem: acute infantile diarrhea).* Courrier (Paris), 29(5), 1979, 451-456. Fren. 9 refs.

Beginning with a real need (the care of children suffering from acute diarrhea in a clinic in Tunisia), the authors have developed a methodology for effective standardization of care in primary health centres. They outline four key steps: definition of priorities, study of data, definition of the mode of action, and evaluation of the strategy used. Each step corresponds to an objective, a method of approach, and an analysis of the results in terms of given criteria. The methodology suggested is independent of the specific problem studied and should increase the efficiency of primary care workers. (Modified journal abstract)

6464 **Getz, L.L., Platt, H.M., Callbeck, P.A.** *Schistosomiasis in South America; II: potential for spread in Brazil.* Biologist (Denver, Col.), 59(2), May 1977, 33-49. Engl. Refs.
See also entry 6854.

Part 2 of this paper on the epidemiology of schistosomiasis in Brazil is concerned with the future development of water resources and the spread of the disease due to the colonization of new areas, in particular the Amazon basin. It is feared that sanitary conditions will be inadequate and that water conditions that will allow the snail hosts, particularly *Biomphalaria glabrata*, to expand their range will be created. In this way, schistosomiasis would continue to be a major health problem in Brazil and possibly increase in severity. (Modified journal abstract)

6465 Goan-Hong, L., Kam-Nio, O., Prawiranegara, D.D., Herlina, T., Sihombing, G. *Available sources of food in Indonesia (for the improvement of nutritional status of children).* Paediatrica Indonesiana (Jakarta), 16, Jan-Feb 1976, 27-41. Engl. 15 refs.

Much malnutrition in Indonesia could be avoided if preschool children were fed locally available foods in suitable combinations and sufficient quantities. This paper discusses and presents—in tabular form indicating quantities, nutrient values, and cost—a number of sample diets that contain foods from the five basic food groups (i.e., cereals, legume/animal products, edible fats, vegetables, and fruits) and meet the recommended Net Dietary Protein/Calorie percent value. A mixture of rice, fat, tempeh (fermented soy product), and fish in a ratio of 100:2.5:10:5 was found to be the most nutritious. Preschoolers should be fed at least 3 times daily, rather than twice as is customary for adults, to ensure the quantitative adequacy of the diet. (HC-L)

6466 Griffiths, D.L. *Treatment of tuberculosis of bone and joint.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 72(6), 1978, 559-563. Engl. Refs. Symposium on Surgical and Medical Treatment of Tuberculosis in Developing Countries, London, UK, 19 May 1977.

In many developing countries, tuberculosis ranks with leprosy as one of the leading orthopedic problems. This article discusses tuberculosis of bone and joint in terms of sites affected (about 60% spinal), pathology, early diagnosis, diagnostic problems, bacteriology, treatment, chemotherapy, follow-up, results of both conservative and operative treatment, failures, the difficult Hong Kong operation, paraplegia, the place of surgery, and the future. (DP-E)

6467 Grove, D.I. *Immunity in filariasis: a review.* Papua New Guinea Medical Journal (Port Moresby, Papua New Guinea), 21(1), Mar 1978, 32-42. Engl. Refs.

This article reviews the importance of the immune response in the prevention and control of the types of filariasis common to Papua New Guinea. Topics covered include antigens, immunopathology, immunological responses, natural and acquired resistance to infection, immunization, and immunodiagnosis. (DP-E)

6468 Guillozet, N. *Measles in Africa: a deadly disease; some personal comments.* Clinical Pediatrics (Philadelphia, Pa.), 18(2), 1979, 95-100. Engl. 21 refs.

Measles dominate childhood illnesses in tropical Africa with a variety and severity of complications unknown in the West. There is no apparent continental variation in measles virus but environmental factors vary widely. The frequent association of severe measles with malnutrition and recent studies indicating impaired humoral, cellular, and mucocutaneous immunologic function in the malnourished may explain this perplexing disease. Prevention of early malnutrition combined with lasting and economic early immunization with heat-stable vaccine, currently unavailable, are needed to halt this frequent, costly, and often fatal African scourge. (Journal abstract)

6469 Harris, G.F. *Lepra children's fund.* Leprosy Review (London), 49(3), Sep 1978, 241. Engl.

Since 1936, Lepra has been aware that leprosy treatment is most effective when given regularly to afflicted children. Consequently, its policy is to encourage the early diagnosis and regular treatment of children by giving small *per capita* grants of £5 for the 1st 100 children in any African control programme and £4 for similar Indian children. In 1977, £42 000 were spent in this way. To obtain a grant, a list of the children's names and a statement of the previous year's grant expenditures must be sent to the Director of Lepra at Fairfax House, Causton Road, Colchester, Essex, C01 1PU, England; instructions and application forms can also be obtained from this address. (DP-E)

6470 Houghton, D.L. *Psychosomatics of malaria.* Papua New Guinea Medical Journal (Port Moresby, Papua New Guinea), 23(1), Mar 1980, 26-33. Engl. 31 refs.

Cerebral malaria with symptoms resembling those of mental illness is one psychosomatic manifestation of the disease; other psychological aspects can occur in the form of biological, psychological, or social factors that can influence malaria incidence and distribution. For example, the low status of malaria workers decreases their morale and efficiency and individuals may obstruct malaria control operations by refusing to have their houses sprayed or take their medication. In Papua New Guinea, cultural beliefs, behavioural habits, agricultural development, and population movement may also contribute to the spread of the disease. (DP-E)

6471 Job, C.K. *Immunology and the changing profile of leprosy.* Leprosy in India (New Delhi), 50(2), Apr 1978, 214-230. Engl. 80 refs.

This article examines various aspects of leprosy. It discusses the causative organism, pathology and classification, transmission to experimental animals, the lepromin test, defenses against infection (external barriers, cell mediated immunity, humoral immunity, and the immunological defect in lepromatous leprosy), immunogenetics, immunotherapy, and the development of a leprosy vaccine. It is emphasized that regular, continuous anti-leprosy therapy over a period of several years is the best form of disease control because it leads to a cure rate of 97.8%. (DP-E)

6472 **Jordan, J., Bebelagua, A., Rubén, M., Hernández, J.** *Investigación nacional sobre crecimiento y desarrollo, Cuba 1972-1974; I: diseño y método. (National study of growth and development, Cuba 1972-1974; I: design and method).* Revista Cubana de Pediatría (Havana), 49(4), Jul-Aug 1977, 367-390. Span. 23 refs.

From 1972-1974, a national study of child growth and development was undertaken in Cuba. Fifteen anthropometric parameters and indicators of puberal development for 50 360 children aged 0-19 years were measured by women specifically trained for the task. Thirty percent of the children were measured a year later to assess their rate of growth. This paper describes the study sample and methodology and discusses some of the problems encountered in its implementation. Statistical data are included. (HC-L)

6473 **Jornal de Pediatria, Rio de Janeiro.** *Calendário ideal de vacinação para 1978/1979. (Ideal vaccination calendar for 1978/1979).* Jornal de Pediatria (Rio de Janeiro, Brazil), 45(6), 1978, 419. Portuguese.

This paper presents the vaccination schedule that was proposed by the infectious diseases committee of the Brazilian society of pediatrics for children from birth to age 16 years, along with some advice regarding its application. Those immunizations that are compulsory at present are indicated. (HC-L)

6474 **Kaur, P.** *Prevention of leprosy.* Indian Journal of Dermatology, Venereology and Leprology (Vellore, India), 44(1), 1978, 12-15. Engl. 8 refs.

Methods of leprosy prevention are described. Primary prevention (prophylaxis) is very important and can be achieved by reducing a person's susceptibility as well as by limiting his/her exposure to susceptible individuals. The former measure requires general health promotion, immunoprophylaxis, and chemoprophylaxis, while the latter is achieved by isolation and early detection of cases. A critical review of these measures is presented. Secondary prevention entails early detection of cases and their prompt treatment. Tertiary prevention involves the prevention of deformities and rehabilitation of those who are already disabled. (Modified journal abstract)

6475 **Keusch, G.T., Katz, M. ed(s).** *Effective interventions to reduce infection in malnourished populations; part II.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(12), Dec 1978, 2198-2356. Engl. Refs.
Symposium on Effective Interventions to Reduce Infection in Malnourished Populations, Port-au-Prince, Haiti, 12-16 Jun 1977.
See also entry 6476 for part 1.

Part II of these symposium proceedings covers the last three sessions. During the 4th session on prophylactic measures, four papers were presented dealing with the effects of oral antibiotic use in children, ecological control of bacterial diarrhea, the aetiology and control of viral diarrhea, and the role of vaccines and vaccination programmes. The 5th session concerned health care interventions with papers on the current status of oral therapy, convalescent care after acute infection, and a comparison of two child health projects. The final session focused on key aspects in the control of diarrheal diseases, including nutrition education, medical technology, nutrition evaluation, and economic resources. (FM)

6476 **Keusch, G.T., Katz, M. ed(s).** *Effective interventions to reduce infection in malnourished populations.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(11), Nov 1978, 2031-2126. Engl. Refs.
Symposium of the Subcommittee on Interactions of Nutrition and Infection Committee on International Nutrition Programs, Port-au-Prince, Haiti, 12-16 Jun 1977.
See also entry 6475.

A multidisciplinary group of experts met to determine the feasibility of attempting to improve human nutritional status through programmes designed to interrupt the transmission, or to decrease the impact, of infectious diseases. The meeting was divided into three sessions, focusing on an analysis of the Narangwal field study on nutrition-infection interactions, nutrition interventions (i.e., breast-feeding, weaning foods, and preschool supplements), and water and other environmental interventions, respectively. This report presents the position papers and summarizes the discussions relative to the three sessions. (HC-L)

6477 **Lancet, London.** *WHO/UNICEF meeting.* Lancet (London), 2(8147), 20 Oct 1979, 841-843. Engl.

This article outlines the recommendations of a WHO/UNICEF meeting attended by delegates from 23 nations and the UN as well as representatives of the infant food industries. These recommendations concern: the encouragement and support of breast-feeding during and after pregnancy; weaning practices and the use of local food resources; education, training, and information; improving the health and social status of women; and the marketing and distribution of infant formula and weaning foods. A preconference statement by the International Council of Infant Food Industries is quoted and discussed and the results of WHO's collaborative study on breast-feeding and the War on Want's latest investigation are examined. (DP-E)

6478 **Larivière, M.** *Diagnosis and prophylaxis of enteric parasitoses: a springboard for community health actions.* Children in the Tropics (Paris), 119, 1979, 1-21. Engl.

The author discusses some of the problems involved in the diagnosis and treatment of intestinal parasitic diseases in children. In examining the epidemiology of enteric parasitoses, he covers the role of climate, soil, and human factors in the short and long direct cycle, as well as the indirect cycle, of infection. Schematic diagrams illustrate modes of transmission and contamination, emphasizing the importance of hygiene. The role of the microscopist as an integral part of any health team involved in such diseases is stressed. A concluding chapter outlines control measures in the area of chemoprophylaxis, sanitation, environmental health, and health education. (FM)

6479 **Leeuwenburg, J., Ferguson, A.G., Omondi-Odhiambo** *Machakos Project studies; agents affecting health of mother and child in a rural area of Kenya; XIII: spatial contagion in measles epidemics.* Tropical and Geographical Medicine (Haarlem, Netherlands), 31(2), Jun 1979, 311-320. Engl. 13 refs.

See also entries 5065, 5571, 5572, 5573, 5714, 5715, 6273, 6788, and 7551.

The Machakos Project (Kenya) has yielded data by which it is possible to analyze spatial aspects of contagion in measles epidemics. Problems of geographical scale and interaction patterns occlude the spatial factor and rather different spectra of outbreaks were seen when the data were analyzed at sub-location level. The likely patterns of spatial contagion are indicated and the need for smaller-scale study is pointed out. The role of secondary infection is considered and two proposed approaches to mathematical simulation are briefly described. Statistical data are included. (Modified journal abstract)

6480 **Lock, W.** *Bekämpfung der Tuberulose in der Welt. (Global control of tuberculosis).* Praxis der Pneumologie vereinigt mit der Tuberkulosearzt (Stuttgart, Germany FR), 32(8), Nov 1978, 529-536. German.

The control of tuberculosis requires international cooperation. Provided the financial resources are put to correct use, the success rate can be considerable, as has been shown in the remarkable improvement in the tuberculosis situation among the Eskimos and Indians of Alaska, Canada, and Greenland. Once a certain degree of improvement has been achieved, the individual countries are generally capable of bearing the cost of the project and foreign aid can be reduced. Until this stage has been reached, the German Federal Republic is under an obligation to cooperate in the fight against tuberculosis. (Modified journal abstract)

6481 **Longhurst, R.W.** *Malnutrition and the community—the social origins of deprivation.* Proceedings of the Nutrition Society (London), 38(1), May 1979, 11-16. Engl.

This paper discusses some of the underestimated determinants of malnutrition in rural communities from an agricultural point of view, with emphasis on the cropping pattern. The cropping pattern is important for four reasons: the nutrient content of what is grown influences which nutrients are consumed; different cropping patterns have different labour needs that influence the allocation of time within the household and may provide employment for landless labourers; the seasonality characteristics of the cropping patterns have an impact on the quality of nutrition at different times of the year; and access to land, labour, and improved technology influences the extent and nature of the marketable surplus. (DP-E)

6482 **Lorenzo y Deal, J., Lorenzo y de Ibarreta, J.** *Hábito alimentario del niño uruguayo; su evolución. (Diet of the child in Uruguay; its evolution).* Archivos de Pediatría del Uruguay (Montevideo), 49(3), 1978, 230-242. Span. 68 refs.

This paper presents a literature review and discussion of diet and dietary changes in Uruguay from the turn of the century up to the present. Topics covered include the scarcity of meat and meat products, the influence of modernization on food habits, food preservation methods, breast-feeding practices, and the implications of the foregoing for the lower socioeconomic classes. A national enquiry into child nutrition similar to that undertaken in 1962 is called for. (HC-L)

6483 **MacDonald, W.W.** *Vector-borne parasitic diseases in developing countries.* Bulletin of the Haffkine Institute (Bombay, India), 6(2), 1978, 43-50. Engl.

Asian Congress of Parasitology, Bombay, India, 23 Feb 1978.

The author describes some of the parasitic disease control efforts, with emphasis on those aimed at malaria, that have been carried out in India during the last century. The work of Malcolm Watson, a pioneer of malaria control, is highlighted. Improved living conditions, while not a direct disease control measure, have contributed to the decreased incidence of some diseases, while others, including bancroftian filariasis, dengue haemorrhagic fever, and yellow fever, continue to flourish. The use of pesticides in vector conrol programmes is also discussed. (DP-E)

6484 **Maian, R.M., Haratani, J., Schneider, C., Spielman, A.** American Public Health Association, Washington, D.C. USA, Agency for International Development, Department of State. *Northern zone, Lake Chad Basin environmental health assessment (BOL Polder Project Area).* Washington, D.C., American Public Health Association, International Health Programs, 1977. 92p. Engl. 42 refs.

This report of the Bol (Chad) land reclamation project describes the lake area and its environmental and health situations as well as the composition and activities of the study team. The epidemiology and transmission of malaria and schistosomiasis in the area are analyzed in detail, with some attention given to anthropometry and housing. Recommendations are made concerning health status, environmental health, and the control of malaria and schistosomiasis. Exhibits include maps, diagrams, and statistical data. (DP-E)

6485 **Martins Campos, J.V.** *Panorama da nutrição no Brasil. (Overview of nutrition in Brazil).* Problemas Brasileiros (São Paulo, Brazil), Dec 1979, 6-18. Portuguese. 56 refs.

This paper reviews the problem of childhood malnutrition in Brazil, its relationship to demographic growth and urbanization, and current efforts to alleviate it. Some proposals for action in the areas of policy-making, agriculture, health, education, and communications are put forward and several commentaries on the review are summarized. (HC-L)

6486 **Matovu, D.B.** *Prospects of schistosomiasis in the proposed Lake Mtera in Tanzania.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(2), Jun 1978, 193-197. Engl. 8 refs.

Pre-impoundment studies were conducted to determine the present and future schistosomiasis situation in the proposed man-made lake at Mtera, Tanzania. The population, at the time of the survey scattered in small villages, was estimated at 2 000, although this figure fluctuates with the seasons and is higher in the rainy season when the fishermen from the neighbouring districts go to the area to fish in the Ruahas. The bilharzia prevalence rates were low in the actual area to be under water but high in the neighbouring village of Kisima. ***Bulinus (Physopsis) nasutus*** snails were collected from several places in the area. The potentials for other vectors and of the disease in the future Lake Mtera are discussed. (Modified journal abstract)

6487 **Matzke, G.** *Settlement and sleeping sickness control—a dual threshold model of colonial and traditional methods in East Africa.* Social Science and Medicine (Oxford, UK), 13D(4), Dec 1979, 209-214. Engl. 10 refs.

Traditional and colonial responses to outbreaks of sleeping sickness (trypanosomiasis) in southeast Tansania consisted of two opposing strategies, both of which, apparently, worked. Extreme settlement dispersion (the traditional response) prevented epidemic outbreaks by limiting human targets for infective flies; high-density settlements surrounded by cleared land (the colonial response) removed the sleeping sickness danger by eliminating the tsetse habitat. It is concluded that there is a range of settlement densities between these two that is especially favourable to sleeping sickness epidemics. (HC-L)

6488 **Mazzáfero, V.E., Boyer, M., Moncayo-Medina, A.** *Distribution of tetanus in Argentina.* Bulletin of the Pan American Health Organization (Washington, D.C.), 15(4), 1981, 327-332. Engl. 8 refs.

Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 90(6), 1982, 533-542.

The authors examine the available data on tetanus in Argentina from 1965-1977, when the annual overall national case rate generally ranged from 1.2-1.7:100 000 inhabitants, and shed light on some of the disease's epidemiologic features. Geographic, climatic, and seasonal variations influencing tetanus incidence are described, showing highest morbidity and mortality in hot, humid, and fertile areas, particularly during the summer (December-February) months. With evidence of neonatal tetanus producing a very high case:fatality ratio, prevention measures by full immunization of pregnant women are warranted. Close examination of data, however, suggests significant deficiencies in the country's system for registering and reporting tetanus cases. (EB)

6489 **McMahon, J.E.** *Treatment of schistosomiasis; factors affecting chemotherapy and reflections on ideal drug treatment.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(2), Jun 1978, 161-174. Engl. Refs.

This article reviews the multiple factors that influence the chemotherapeutic response in schistosomiasis, emphasizing that an understanding of these factors is essential for the design of drug trials in the search for the ideal schistosomicide. With regard to antischistosomal drugs, elements such as dosage, parasitic drug-absorption, prophylaxis, and mode of action are considered. A section on the parasitic worm examines number of schistosomes, maturity, species susceptibility, worm shift, etc. Other sections discuss host variables (nutrition, immunity, race, sex, etc.), and the ideal therapy, including the design of trials. (DP-E)

6490 **McNaughton, J.W.** *FAO's activities in nutrition education and training.* Food and Nutrition (Rome), 4(1-2), 1978, 20-24. Engl. Refs.

FAO's nutrition education and training activities consist mainly of assessment of training needs, technical assistance in strengthening nutrition education and training, and preparation of training materials. An attempt is made to assess these activities, particularly the nutrition institutes FAO has founded in Latin America and the training of nutrition workers all over the world. Future training endeavours will concentrate on assisting governments to strengthen their planning capacities and to integrate nutritional objectives into agricultural and rural development projects and on educating teachers for training grass-roots nutrition workers. (DP-E)

6491 **Menke, H.E.** *Sexually transmitted diseases in Surinam; observations and thoughts.* British Journal of Venereal Diseases (London), 54(4), Aug 1978, 215-217. Engl.

Despite a lack of specific information, the similarities in social structure and culture make it probable that the pattern of venereal diseases in Surinam most closely resembles that of other Caribbean countries. European doctors are reminded that serological tests for syphilis on immigrants from Surinam who have had yaws will yield false positive results. The author also discusses international prostitution and its contribution to the spread of venereal diseases. (DP-E)

6492 **Miller, L.H.** *Current prospects and problems for a malaria vaccine.* Journal of Infectious Diseases (Chicago, Ill.), 135(5), May 1977, 855-864. Engl. 38 refs.

A decade ago, few scientists considered vaccination against malaria a realistic goal because of the susceptibility of humans to repeated infection, the difficulty of obtaining a parasite culture for the production of antigens, and the limited success of vaccine trials in animals. However, confidence in present malaria measures was such that the need to commit large resources to malaria research was not felt. Now, however, shortcomings in the traditional approach have altered the picture. This paper reviews the current prospects for and obstacles to the development of a malaria vaccine. (HC-L)

6493 **Montalván C., J.A.** *Fiebre amarilla y su evolución en el Ecuador. (Yellow fever and its evolution in Ecuador).* Revista Ecuatoriana de Higiene y Medicina Tropical (Guayaquil, Ecuador), 30(3), 1977, 261-271. Span.

Yellow fever is a serious communicable disease of epidemic character with a mortality of up to 80%. This paper traces the history of the disease in the western hemisphere and of efforts to understand and combat it. In Ecuador, *Aedes aegypti* (the urban vector of the disease) has been eliminated since 1951 and control efforts have been focused on preventing its reimportation and vaccinating those living or travelling in the Amazon regions where the selvatic form of the disease persists. Further research into the epidemiology of selvatic yellow fever is called for. (HC-L)

6494 **Navrange, J.R., Limaye, A.S., Gulwani, S.V.** *Vitamin A and its role.* Maharashtra Medical Journal (Poona, India), 24(5), Aug 1977, 201-207. Engl. 38 refs.

This article examines the chemical construction of vitamin A and its role in body maintenance. Animal and plant sources of vitamin A and minimum daily requirements are listed. Vitamin A deficiency can be caused by inadequate intake, parasitic infections, inadequate intestinal absorption, and stress. Its clinical features include eye lesions, skin infections, susceptibility to other types of infections, and malnutrition. Methods of diagnosing and preventing vitamin A deficiency are also discussed. (DP-E)

6495 **Ngoka, J.M., Mutinga, M.J.** *Visceral leishmaniasis in Kenya; the onset of an epidemic outbreak in the Machakos district of Kenya, 1972-1977.* East African Medical Journal (Nairobi), 55(7), Jul 1978, 328-331. Engl.

In an epidemiological study of confirmed cases of visceral leishmaniasis admitted to two Kenyan hospitals from 1972-1977, the patients' homesteads were plotted on a map in order to observe the geographical distribution of the disease. The results revealed that the affected areas were closely correlated with already-known leishmaniasis foci and also with some sort of water supply. The new outbreak is attributed to a recent drought and subsequent famine; the movement of people in search of food could have contributed to the spread of the disease. Dogs are probably the main vectors. (DP-E)

6496 **Nóbrega, F.J. de, Santos, A., Castro Filho, A. de, Fonseca, A., Lima, A.J. de** *Utilização de derivados da soja na alimentação infantil. (Use of soybean products in infant feeding).* Jornal de Pediatria (Rio de Janeiro, Brazil), 45(1), Jul 1978, 46-48. Portuguese.

This paper explains why the *Grupo de Trabalho para o Estudo da Desnutrição da Sociedade Brasileira de Pediatria* considers soy-based formulas preferable to milk-based formulas for infants and others; it then sets forward the regulations governing the production and content of such formulas. (HC-L)

6497 **Oficina Sanitaria Panamericana, Washington,** D.C. *Malaria en las Américas. (Malaria in the Americas).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 85(11), Nov 1978, Número Especial, 377-482. Span. Refs. Grupo de Estudio sobre el Control de la Malaria en las Américas, Washington, D.C., 12-15 Apr 1977.

Deterioration in the epidemiological situation of malaria in many parts of the world has prompted a reconsideration of the conventional approach to the disease. This journal issue contains: original papers on epidemiological aspects, costs, research, vector control, optimal resource utilization, and malaria programmes in rural health services; a review of the future orientations of malaria programmes; the text of conclusions and recommendations from the study group on malaria control in the Americas; and reviews of various books, publications, and events relevant to the topic. (HC-L)

6498 **Omawale** *Nutrition problem identification for development planning purposes.* Philippine Journal of Nutrition (Manila), 30(4), Oct-Dec 1977, 164-173. Engl.

The identification of nutritional problems in the Philippines is discussed. These problems may include simple production and supply of food, distribution within a family, or lack of clean water to wash hands or fuel to boil it for use in feeding infants, which can lead to infection, malabsorption, and malnutrition. The best solution to malnutrition is socioeconomic development. A method for identifying the problems is proposed, using as an example Abra province, which has been divided into accessible and inaccessible municipalities. (Modified journal abstract)

6499 **Ouvrard-Pascaud, M.** *200 médicaments dits essentiels. (Two hundred so-called essential drugs).* Concours Médical (Paris), 100(25), 1978, 4317-4319. Fren.

WHO's publication of a list of 200 essential drugs has caused some consternation among medical personnel and the pharmaceutical industry. The garbled version presented by some of the media has raised the fear of an attack on the freedom of prescription and of a brake on innovation and therefore on pharmaceutical research. The authors have felt it necessary to replace this list in its original context, where it was meant to serve as a guide not limited to developing countries, which will have to adapt it to their own needs and health policies. At the same time, the danger of expanding this type of list to Western countries is stressed. (DP-E)

6500 **Oyerinde, J.P.** *Human* Ancylostoma *infections in Nigeria.* Annals of Tropical Medicine and Parasitology (London), 72(4), 1978, 363-367. Engl. Refs.

An estimate of the proportion of infections with *Ancylostoma duodenale* amd *Necator americanus* by the examination of larvae collected from the stools of 220 Nigerians infected with hookworm revealed that 59% of the infections were due to *N. americanus* only; *A. duodenale* always occurred in association with *N. americanus*. In 12% of the infections, it is suggested that there were approximately 3 female *A. duodenale* and 95 female *N. americanus*. Evidence is given that egg size can be important in the differentiation of the two species. A method of calculating the proportion of the two hookworms, and hence of other intestinal nematodes, in mixed infections in an individual as well as in the general population, is also described. Statistical data are included. (Modified journal abstract)

6501 **Pacheco, C.R.** *Programa Nacional de Control de la Tuberculosis. (National tuberculosis control programme).* Gaceta Médica de México (Mexico City), 114(7), Jul 1978, 347-353. Span.

This paper discusses the contribution of tuberculosis to morbidity and mortality in Mexico and outlines the policies, objectives, activities, organization, and evaluation system of the *Programa Nacional de Control de la Tuberculosis*; it has been distributed to all health facilities in the country with a view to coordinating the disease control effort. Statistical data are included. (HC-L)

6502 **Pak, N., Tagle, M.A.** *Fórmula de garbanzo (*Cicer arietinum*) para la alimentación del lactante. (Chickpea (*Cicer arietinum*) diet for infants).* Pediatría (Santiago), 19(1), 1976, 31-34. Span. 17 refs.

A mixture of chickpea flour (80%), plus skim milk powder and DL-methionine (20%), has been developed in Chile and used as the basis for an infant formula and in the treatment of prolonged or acute diarrhea. The chickpea formula is richer in protein than two milk-based formulas and has performed well from the points of view of acceptability, tolerance, and results. This paper describes the composition, preparation, and nutritive value of the basic mixture and formula. (HC-L)

6503 **Pereira, S.M.** *Measles in Indian children.* Health and Population (New Delhi), 2(1), Jan-Mar 1979, 32-37. Engl. 22 refs.

Many Indian children afflicted with measles suffer serious complications such as bronchopneumonia, gastroenteritis, and malnutrition. These complications lead to a subsequent mortality of 10%-20%, especially in rural and low-income communities. The author suggests that the best method of reducing measles mortality is to vaccinate vulnerable children against the disease. (Modified journal abstract)

6504 **Prader, A.** *Catch-up growth.* Postgraduate Medical Journal (London), 54, 1978, Suppl. 1, 133-146. Engl. Refs.

Catch-up growth is a regular phenomenon seen in young children after a period of growth retardation when the cause of the growth deficit is removed. It consists of an immediate growth acceleration with an abnormally high velocity followed by a progressive deceleration till the original or normal growth channel is reached. Examples of individual patients and groups of patients with endocrine disorders, metabolic disorders, malnutrition, and prenatal growth retardation are given. Clinical experience shows that complete or near-complete catch-up growth is possible in infants or young children, but not in children near or in puberty. The factors responsible for catch-up growth and the regulating mechanisms are unknown. A brief discussion follows the article. (Modified journal abstract)

6505 **Rajalakshmi, R.** *Small for dates babies.* Baroda Journal of Nutrition (Baroda, India), 5, 1978, 83-92. Engl. 70 refs.

This paper briefly reviews the literature on the effects of low birth weight on childbirth and development. Research findings suggest that, under favourable conditions, the small-for-dates baby suffers no handicap. In India, however, most of these babies are born into poor families where they face continuing deprivation after birth and a real threat to their survival. It is concluded that low birth weight is a needless risk that could be virtually eliminated by improved antenatal care. (HC-L)

6506 **Ramirez Mayans, J.A., Salas Alvarado, M., Loredo Abdala, A., Alvarez Navarro, P., Martínez Ortiz, J.L.** *Alimentación en niños de peso bajo al nacimiento. (Nutrition of children of low birth weight).* Boletín Médico del Hospital Infantil de México (Mexico City), 34(1), Jan-Feb 1977, 185-203. Span. 38 refs.

This paper describes the nutritional needs of low-birth-weight infants (defined as those below the 3rd percentile of expected weight for gestational age) and how they differ from the needs of normal infants; reviews the characteristics of human milk that make it particularly desirable for such infants; and compares and contrasts the nutritional components of humanized milk formula (the least inadequate substitute for breast milk), semi-skimmed milk formula, whole powdered milk and whole evaporated milk, and soya-based milk and whether and how they may be adapted for the feeding of low-birth-weight infants. (HC-L)

6507 **Rampen, F.** *Venereal syphilis in tropical Africa.* British Journal of Venereal Diseases (London), 54(6), Sep 1978, 364-368. Engl. Refs.

It was once feared that the eradication of yaws in Africa would render large populations susceptible to *Treponema pallidum*. A review of the literature, however, indicates a decline in the incidence of venereal syphilis and an analysis of Khan test results for the years 1968-1975 in two hospitals in Blantyre, Malawi, supports this downward trend. It is suggested that the indiscriminate prescribing of penicillin for a wide variety of diseases may be inadvertently curing many subclinical cases of syphilis and thus contributing to its decline. (HC-L)

6508 **Reeder, B.A.** *Experiences in epidemiological research in Africa.* Guelph, Ont., Canadian Association of African Studies, n.d. 8p. Engl.

Based on his experience investigating typhoid fever in Cameroon, the author discusses the difficulties that may be encountered in carrying out epidemiological research in Africa and how they may be overcome. It is hoped that the information will be of use to the increasing numbers of medical practitioners who are becoming involved in such research. (HC-L)

6509 **Rele, J.R.** *Planning for development and population growth in India.* Journal of Human Evolution (London), 7(1), 1978, 77-83. Engl. Refs.

The current rapid population growth in India is due to a marked decline in mortality rather than to economic and social development. Consequently, future population growth will depend largely upon fertility decline. The analysis shows that the birth rate, as well as fertility, has also declined, especially after 1966 and particularly among urban women. The available evidence clearly indicates an inverse relationship between women's education and fertility. The author suggests that development, which promotes urbanization and education, will eventually contribute to a reduction in marital fertility in India. (Modified journal abstract)

6510 **Richter, E.D., Tulchinsky, T.** *Epidemic suppression packages in disasters: a public health viewpoint.* Public Health (London), 93(4), Jul 1979, 204-209. Engl. 16 refs.

Some suggestions for planning disease control measures to be implemented after a disaster are presented. Restoration of the water supply for drinking and washing is probably the most important step in interrupting the transmission of communicable diseases. For diarrhea and enteritis, case detection and immediate antibiotic treatment are sensible temporary control measures. Other diseases may require immunization campaigns, for which the public should be prepared ahead of time. Measures to restore the sanitary infrastructure (water supply, garbage disposal, sewerage, pest control) are basic to disease control and anticipating these measures is an important part of predisaster planning. (Modified journal abstract)

6511 **Rojas-Aleta, I.** *Project planning, implementation and evaluation.* Philippine Journal of Nutrition (Manila), 31(1), Jan-Mar 1978, 2-9. Engl.

Kilusan, a nation-wide movement in the Philippines to promote food conservation by preventing waste and encouraging proper eating habits, is described. This article examines the Kilusan methodology, which involves the selection of an area, cooperation with local persons, identification of particular problems, definition of the goals of any development of particular project initiated by Kilusan, required resources and their best use, monitoring of the project, and evaluation of its results. (Modified journal abstract)

6512 **Romero, A., Zeissig, O., España, D., Rizzo, L.** *Tifus exantemático en Guatemala. (Exanthematic typhus in Guatemala).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 83(3), Mar 1977, 223-236. Span. 14 refs.

This article examines the epidemiology of typhus in Guatemala, studies epidemics that occurred in 1972 and 1975, and proposes some practical control measures. A long-range epidemiological surveillance system based in local health centres should be organized, including case-reporting, laboratory investigations, and control of louse infection. Given the cultural characteristics of the Indians, health education activities using loudspeakers should be avoided, because they frighten the people into running away and hiding in the bush. A number of disease control studies are recommended. Statistical data are included. (Modified journal abstract)

6513 **Rosenberg, I.H., Solomons, N.W.** *Potential for antidiarrheal and nutrient-sparing effects of oral antibotic use in children: a position paper.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(12), Dec 1978, 2202-2207. Engl. 45 refs.

This paper reviews the evidence that prophylactic administration of antibiotics might break the cycle of enteritis, malabsorption, and malnutrition in children in developing countries. It weighs the potential risk of prolonged antibiotic use against the risk to life occasioned by poor hygiene, diarrheal disease, and childhood malnutrition and concludes that additional pilot studies of antibiotic use in such circumstances are justified. The danger of emerging strains of resistant bacteria could be obviated if bacitracin rather than tetracycline were the drug of choice. (HC-L)

6514 **Roundy, R.W.** *Model for combining human behavior and disease ecology to assess disease hazard in a community: rural Ethiopia as a model.* Social Science and Medicine (Oxford, UK), 12(2D), 1978, 121-130. Engl. 27 refs.

A method for assessing communicable diseases hazardous to a given population, with examples from a rural Ethiopian village, is presented. The method combines knowledge of disease agents present, life cycles and mode of transmission of these agents, and normative cultural behaviour of the at-risk population. This methodology can be used on any scale and resulting policy suggestions can be implemented as preventive measures against disease hazards. Diseases are considered as hazard systems rather than individual or isolated medical problems. Researchers, including local people outside the traditional medical disciplines, can be used for the gathering and initial assessment of harzard-related data. (Modified journal abstract)

6515 **Sabry, Z.I.** *Assessing the nutritional status of populations; technical and political considerations.* Food and Nutrition (Rome), 3(4), 1977, 2-6. Engl. Refs.

Important considerations in conducting nutrition surveys are discussed. These include the definition of the objectives of the survey, sampling methods consistent with those objectives, methods of estimating nutritive status, and analysis and interpretation of the results by valid standards. The importance of publicizing the findings of nutrition surveys is often overlooked, but reports in simple language prepared for the mass media could be powerful educational tools. (Modified journal abstract)

6516 **Sambasivan, M.** *Survey of the problems of head injuries in India.* Neurology India (Bombay, India), 25(2), Jun 1977, 51-59. Engl.

The main causes of head injuries in India are reviewed and a plea is made for: better road engineering, enforcement of laws pertaining to traffic, accident compensation, etc.; better ambulance facilities; public education regarding accident prevention; and the appropriate preparation of general surgeons, who, due to the paucity of neurosurgeons, must manage most head injuries. (HC-L)

6517 **Schweiger, M., Cutting, W.A.** *Barley water babies—a commerciogenic condition?* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(2), Apr 1978, 89-91. Engl.

Some 35% of the malnourished babies seen at the Concern Dispensary, Saidpur, Bangladesh, have a history of being fed barley water. Barley water, "for infants and invalids," is available throughout the country in distinctive tins often advertized by means of pictures of healthy babies. The instructions state that it requires the addition of milk and sugar, but they are poorly laid out, in very small print, and in a language (English) read only by a minority; none of the mothers questioned understood them and believed the powder to be a complete infant food when mixed with water. The manufacturers (Robinson's Foods, parent company: Reckitt and Colman) have been contacted about the syndrome and have agreed to consider changes in advertizing and promoting the product; it is hoped that they will also alert the medical profession to the danger of its misuse. (HC-L)

6518 **Shaffer, R.** *Plague.* AFYA (Nairobi), 13, May-Jun 1979, 66-70. Engl.

In this discussion about bubonic plague and how to control it, the author emphasizes two points: no fleas means no disease and cure is sure. The aetiology of plague from rat to flea to man is traced and the author stresses that with early treatment the disease is rarely fatal. The major aspects of plague control are curing the sick, protecting the exposed, killing fleas, and controlling rats. While fleas can be exterminated using DDT, rats must either be starved or excluded by making human habitations unattractive to them. (DP-E)

6519 **Siboulet, A., Catalan, F.** *Sexually transmitted diseases in children.* Children in the Tropics (Paris), 116, 1978, 2-26. Engl.

This article discusses the epidemiology, diagnosis, and treatment of venereal diseases among children in the tropics. These include gonococcic blennorrhagia (vulvovaginitis and neonatal conjunctivitis), non-gonococcic blennorrhagia (urogenital trichomoniasis, genital candidiases, mycoplasma infections, chlamydia trachomatis infections, and genital herpes), the treponematoses (syphilis), and other diseases such as venereal vegetations, scabies, and pubic phthiriasis. Since many of the drugs commonly used to treat adult patients are contraindicated in juveniles, special attention is given to alternatives suitable for infants and young children. (DP-E)

6520 **Silbert, M.V.** *Immunization in childhood.* South African Medical Journal (Cape Town), 55, 10 Mar 1979, 383-385. Engl.

The immunization schedule for South African children drawn up at a 1978 symposium is presented, with appropriate modifications for older children and in the case of severe reactions. Contraindications to live virus vaccine (pregnancy, generalized malignancy, immune deficiency, etc.) are outlined. Notes on individual vaccines (measles, rubella, smallpox, BCG, poliomyelitis, etc.) also discuss contraindications and complications. (DP-E)

6521 **Simmons, G.B., Smucker, C., Misra, B.D., Majumdar, P.** *Patterns and causes of infant mortality in rural Uttar Pradesh.* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(5), Oct 1978, 207-216. Engl. 53 refs.

The rural areas around Kanpur, Uttar Pradesh, India, exhibit an atypical mortality for a developing country in that most infant deaths occur in the 1st month of life. To discover the reasons for this, 2 192 women in 120 villages were interviewed regarding their pregnancies and child mortality experiences. Tetanus was found to account for 43% of all infant deaths, explaining the concentration of mortality during the neonatal period. The innoculation of pregnant women against tetanus is considered the most effective intervention under the circumstances. Six tables of data are presented and analyzed. (HC-L)

6522 **Singh, C.M.** *Problem of rabies in India.* Health and Population Perspectives and Issues (New Delhi), 3(3), 1980, 215-223. Engl. 20 refs.

This paper deals with rabies in India, where it is an important public health problem because of its epidemic and endemic nature. The author cites various studies on the subject and maintains that the basic philosophy regulating control programmes emphasizes a systematic reduction of vector population, enhancement of immunity by vaccination, and strict surveillance and reinforced regulation of quarantine of imports. The operational measures necessary for the successful implementation of such a control programme are identified and discussed. (Modified journal abstract)

6523 **Spira, D.T., Greenblatt, C.L. ed(s).** *International Symposium on Immunology and Immunopathology of Malaria.* Israel Journal of Medical Sciences (Jerusalem), 14(5), May 1978, 503-516. Engl. Refs.
International Symposium on Immunology and Immunopathology of Malaria, Jerusalem, Israel, 15-18 Aug 1977.

Papers presented at this conference on malaria dealt with the world view of the disease (including malaria surveillance and campaigns in Israel and Palestine), malarial antigens and the mechanism of immunity, and the induction of protective immunity. The discussions of these topics are also included. Many papers contain photographs, references, and statistical data. (DP-E)

6524 **Stott, A.** *Treatment of pulmonary tuberculosis in the developing countries.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 72(6), 1978, 564-569. Engl. Refs.
Symposium on Surgical and Medical Treatment of Tuberculosis in Developing Countries, London, UK, 19 May 1977.

This article examines the financial and technical restrictions faced by developing countries with regard to disease control efforts and describes the various approaches made to bring about effective chemotherapy programming for pulmonary tuberculosis within the resources of these countries. The most common and easiest method is home treatment of patients with one of several available inexpensive regimens for primary treatment. Reasons for failure of chemotherapy are discussed and several types of intermittent chemotherapy are considered, with emphasis on the need to develop a completely oral, once-a-week regimen. Priorities for effective chemotherapy are outlined. (DP-E)

6525 **Stroobant, A., Hrichi, A.** *Etude épidémiologique d'un foyer de fièvre typhoïde dans une localité rurale du Cap-Bon. (Epidemiological study of typhoid fever in a rural area of Cap Bon).* Institut Pasteur de Tunis—Archives (Tunis), 54(1-2), 1977, 73-83. Fren.

In 1975, a typhoid outbreak occurred in a rural locality of Tunisia that lacked a potable water supply and even the most basic sanitation facilities; 69 individuals out of a population of approximately 1 000 were affected. This paper describes the course and epidemiological characteristics of the outbreak and the methods adopted to control it. Statistical data are included. (HC-L)

6526 **Swanepoel, R., Foggin, C.M.** *Occurrence, diagnosis, treatment and control of rabies in Rhodesia.* Central African Journal of Medicine (Salisbury), 24(6), Jun 1978, 107-115. Engl. 8 refs.

The epidemiology and the geographical and species distribution of the 2 486 cases of rabies (44 of them human) that have occurred in Rhodesia since 1950 are examined. The authors stress the need for quick and accurate diagnosis and outline the actions to be taken in the field (capturing or confining the animal, notifying the proper authorities) and in the laboratory (histopathological, immunological, and biological tests). Treatment measures include local treatment of the wound, administering the appropriate serum or vaccine, intensive care of frank cases, and immunization of at-risk populations (veterinarians, laboratory staff, etc.). Control measures are also discussed. (DP-E)

6527 **Thongcharoen, P., Wasi, C., Chavanij, L., Chantarakul, N., Oonsombut, P.** *Rabies: a study at Siriraj Hospital, Bangkok.* Journal of the

Medical Association of Thailand (Bangkok), 61(2), Feb 1978, 99-102. Engl.

This article discusses the results of 98 postmortem laboratory tests for rabies (24 on humans) performed from 1970-1977 at Bangkok Siriraj Hospital in Thailand, which has an annual rabies mortality of 200-300. The need to capture and examine the animal host so that a proper diagnosis can be made is stressed. The authors maintain that all rural hospital laboratories should have the facilities to test for rabies. Statistical data are included. (DP-E)

6528 Tomaszunas, S. *Challenge to South-East Asia; the expanded programme on immunization.* WHO Chronicle (Geneva), 33(6), Jun 1979, 209-213. Engl.

Also published in French, Russian, and Spanish.

WHO's global Expanded Immunization Programme (EIP), designed to help member-country governments establish national immunization programmes, was launched in 1974. After a review of the epidemiology of diphtheria, pertussis, tetanus, tuberculosis, poliomyelitis, and measles in Southeast Asia, the problems of implementing EPI in this region are examined. These problems include planning and management, training, operations, and health education for EPI. The regional development of EPI from 1976-1978 is also discussed. (DP-E)

6529 Trenholme, G.M., Carson, P.E. *Therapy and prophylaxis of malaria.* Journal of the American Medical Association (Chicago, Ill.), 240(21), 17 Nov 1978, 2293-2295. Engl. 14 refs.

Recent trends in malaria therapy are discussed, including treatment, prophylaxis, toxicity, availability of drugs in the USA, and newer agents. A table of oral therapeutic agents gives the preparation, pediatric formulation, salt base, and dosages for adults and children, while a table of parenteral agents outlines preparation, route of administration, salt base, and adult and juvenile dosages. (DP-E)

6530 Udani, P.M., Bhat, U.S., Bhave, S.K., Ezuthachan, S.G., Shetty, V.V. *Problem of tuberculosis in children in India; epidemiology, morbidity, mortality and control programme.* Indian Pediatrics (Calcutta, India), 13(12), Dec 1976, 881-890. Engl. 9 refs.

This article reports the results of a national tuberculosis survey with emphasis on the disease prevalence in children, discusses some of the socioeconomic and environmental factors that contribute to the epidemiology of tuberculosis, describes studies of the disease carried out in various parts of India, and sets forth some suggestions for planning disease control programmes. It is recommended that tuberculosis control programmes for children concentrate on chemotherapy and BCG vaccinations. Statistical data are included. (DP-E)

6531 Valverde, V., Trowbridge, F., Beghin, I., Pillet, B., Nieves, I. *Functional classification of undernourished populations in the Republic of El Salvador; methodological development.* Food and Nutrition (Rome), 4(3-4), 1978, 8-14. Engl. 11 refs.

Typical government nutrition programmes usually lack precise information on the size of the groups that could benefit from interventions, on the different types of potential beneficiaries and their location, and on socioeconomic and cultural characteristics through which they could readily be identified. In the functional classification approach to the definition of nutritional problems, detailed information on human behaviour and social constraints is collected at family and community levels. The data are then interpreted in general terms in order to understand how these factors contribute to inadequate levels of nutrition within larger groups. This new approach should enable more effective measures for reducing the numbers of those living under conditions of deprivation to be presented to planners and decision-makers. Examples from El Salvador are given. (Modified journal abstract)

6532 van Geuns, H.A. *Tuberkulose in den Entwicklungsländern und die Tätigkeit der Internationalen Union zur Bekämpfung der Tuberkulose. (Tuberculosis in developing countries and the work of the International Union for the Control of Tuberculosis).* Praxis der Pneumologie vereinigt mit der Tuberkulosearzt (Stuttgart, Germany FR), 33(1), Apr 1979, Suppl., 561-564. German.

Guidelines for effective control of tuberculosis in developing countries were laid down by WHO in 1974. Emphasis is on protecting young people as far as possible by BCG vaccination and on the early detection and treatment of as many cases of infectious tuberculosis as possible. Diagnosis does not depend on expensive radiographic equipment, as it can be made simply by microscopic examination of the sputum. Various inexpensive drugs are available that succeed within a few weeks in reducing the disease to a non-infectious stage. Sanatorium or hospital treatment is generally not necessary. (Modified journal abstract)

6533 Vohito, M.D. *Fièvre typhoïde; notre expérience à propos de 61 cas. (Typhoid fever; a study of 61 cases).* Médecine d'Afrique Noire (Paris), 26(8-9), Aug-Sep 1979, 649-650. Fren.

The author summarizes characteristics of 61 cases of typhoid fever treated at the University Hospital in Bangui (Central African Republic) in 1977 and 1978. These patients accounted for 3.6% of all cases treated at the hospital during that period. Treatment consisted of progressive dosages of tifomycine for at least 15 days. In 2 cases, the disease reappeared within 2 months of their release from hospital. To prevent such relapses in the future, treatment should be prolonged and supplemented by another antibiotic, ampicillin or sulfamothoxazol-trimathoprime, for at least 1 week. (FM)

6534 **Walker, A.R.** *Infant feeding practices in South Africa; an appraisal of their significance to health.* South African Medical Journal (Cape Town), 54, 11 Nov 1978, 820-822. Engl. 29 refs.

As in most Western populations, the practice of breast-feeding has declined among all South African social groups during recent years, with a predictable increase in infant morbidity and mortality due to bottle-feeding. Black infants in particular suffer from the poor nutritional quality and lack of hygiene of improperly prepared milk feeds and the related tendency to introduce solid foods at too early an age. These problems should all be well publicized by pediatricians. (DP-E)

6535 **Weissman, J.B., Deen, R.M., Williams, M., Swanston, N., Ali, S.** *Island-wide epidemic of salmonellosis in Trinidad traced to contaminated powdered milk.* West Indies Medical Journal (Kingston), 26(3), 1977, 135-143. Engl. 15 refs.

Outbreaks of salmonellosis traced to commercial food products have sometimes been widespread and have represented significant public health hazards. Control of these problems requires effective enteric disease surveillance, rapid implementation of epidemiological investigations, and appropriate laboratory support. This paper describes an island-wide epidemic of salmonellosis in Trinidad in 1973. Methods used in this study may be adapted to enteric disease control in other Caribbean countries. (HC-L)

6536 **White, K.L.** *Health information systems in relation to basic health care.* In Hetzel, B.S., ed., Basic Health Care in Developing Countries; an Epidemiological Perspective, Oxford, UK, Oxford University Press, 1978, 137-145. Engl. 11 refs.

For complete document see entry 6343.

Health information systems should be based on the concept of "perceived need": the perceptions of individuals and societies about their health. Colloquial expressions used to describe symptoms, complaints, and conditions in various settings need to be identified and classified. Other features of a basic care information system include population surveys and data on 1st encounters with health personnel. Methods of data acquisition, aggregation, and presentation are also briefly described. The report concludes by listing some of the epidemiological problems that can be researched by basic health care workers with the help of a well-organized information system. (FM)

6537 **WHO, Geneva.** *Endemic goitre.* World Health (Geneva), Aug-Sep 1979, 10-11. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

The author suggests a simple, effective, and inexpensive way of treating goitre, a disease that is endemic in certain parts of Africa, Asia, and Latin America. Adding iodine to salt costs only US$0.005:person:year. In other cases, an intramuscular injection of iodinated oil offers protection from goitre for 3-5 years. (FM)

6538 **WHO, Geneva.** *Action-oriented research, development and training programme in nutrition.* WHO Chronicle (Geneva), 33(6), Jun 1979, 225-227. Engl.

Also published in French, Russian, and Spanish.

The objective of WHO's new programme to combat malnutrition is to develop and translate into operational activities new knowledge and approaches that are necessary to improve nutritional status and related health aspects through action at the community level. Specific objectives include identifying acceptable and nutritious local weaning foods, improving nutrition education, and integrating nutrition activities into primary care. The programme's two-fold strategy aims at attacking the problem in the 1st years of life and using local resources as much as possible. Some of WHO's research programmes are described. (DP-E)

6539 **WHO, Geneva.** *Nutrition and child health.* WHO Chronicle (Geneva), 33(4), Apr 1979, 125-127. Engl.

Also published in French, Russian, and Spanish.

This article discusses the importance of breast-feeding for preventing malnutrition in children in developing countries, where bottle feeding can even be dangerous because of a lack of sanitation and safe water supplies. The risks of early and improper weaning are described, as well as the dangers of relying too much on food donations that encourage the people to develop a taste for foreign foods that are not normally available. Production of weaning foods and all nutrition programmes should be based on local foodstuffs and backed up by nutrition education. (DP-E)

6540 **WHO, Geneva.** *Control of diarrhoeal diseases: WHO's programme takes shape.* WHO Chronicle (Geneva), 32(10), Oct 1978, 369-372. Engl.

Also published in French, Russian, and Spanish.

This article discusses recent advances in knowledge and techniques for controlling diarrheal diseases and examines factors that must be considered in formulating a control strategy. These factors include: oral rehydration therapy; the diarrhea/malnutrition cycle; water supply, sanitation, and food hygiene; epidemiological surveillance; and cholera and typhoid vaccines. The WHO programme and its implementation are also described. (DP-E)

6541 **WHO, Geneva.** *WHO activities in child mental health and psychosocial development.* International Journal of Mental Health (New York), 7(102), 1978, 148-157. Engl.

Recent WHO research and programme activities that have a bearing on the mental health and psychological development of children are outlined and briefly discussed. These include seminars and studies on infant and child development, maternal deprivation, the care of homeless children, hospitalized children, child psychiatry and child guidance, mental retardation, suicide and attempted suicide, juvenile guidance, juvenile delinquency and social maladjustment, and standardization of psychiatric diagnosis, classification, and statistics. (DP-E)

6542 **WHO, Geneva.** *Strategy of leprosy control.* WHO Chronicle (Geneva), 32(5), May 1978, 193-199. Engl.

Also published in French, Russian, and Spanish.

WHO, in the most recent (5th) report of the WHO expert committee on leprosy, outlines a control strategy that is based on training primary health care workers to make a tentative diagnosis of leprosy and on the integration of preventive, promotive, curative, and rehabilitative measures at the community level. This paper summarizes the report, pointing out recommended techniques and potential problems related to the aforementioned aspects of the control of the disease. (HC-L)

6543 **Wigley, S.C.** *Psychosomatics of tuberculosis.* Papua New Guinea Medical Journal (Port Moresby, Papua New Guinea), 23(1), Mar 1980, 34-40. Engl. 22 refs.

Tuberculosis has never been regarded as a psychosomatic disease because the causal bacterium is known, but psychic as well as physical stress can be a factor in its aetiology by depressing the immune system. Some psychological precursors of tuberculosis are war, migration, urbanization, and emotional strains such as bereavement or loss of a job. The influence of these factors on the incidence of tuberculosis in Papua New Guinea is studied and some control measures are suggested. (DP-E)

6544 **Windle-Taylor, E.** *Relationship between water quality and human health: medical aspects.* Royal Society of Health Journal (London), 98(3), Jun 1978, 121-129. Engl. 56 refs.

After examining methods that have been successfully used to control water borne diseases, the author examines some of the problems that still exist, even in developed countries. For example, water supplies can still be contaminated by natural pathogens such as bacteria (causing cholera, typhoid fever, dysentery, etc.), viruses (causing infectious hepatitis, poliomyelitis, and enteric diseases), and parasites harmful to humans. Also, toxic chemical substances such as arsenic, mercury, and a variety of organic compounds (oil, detergents, pesticides, etc.) can be accidentally introduced and trace metals can occur naturally. (DP-E)

6545 **Witjaksono, H., Bencic, Z., Hendro, S., De Witt, W.E., Soediono, S.** *Endemicity of cholera in Surabaya, Indonesia.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 10(1), Mar 1979, 100-105. Engl. Refs.

As the 7th Indonesian pandemic of cholera has been caused by *Vibrio cholerae* biotype El Tor rather than the classical strain, the former criteria for endemicity must be reconsidered with regard to infected areas. Because cholera mortality can be reduced to a very low level using modern methods of treatment, it is suggested that cholera infection rates be taken into consideration as criteria of cholera endemicity, i.e., 5 years persistence of cholera cases in a given area, 5% infection rate among family contacts of cholera cases, and a minimum infection rate of 1% in a vicinity where cholera cases occur. It was also found that eliminating *Vibrio cholerae* from an endemic area, even when all family contacts are treated with the full dose of tetracycline, is very difficult. (Modified journal abstract)

6546 **Woodruff, C.W.** *Science of infant nutrition and the art of infant feeding.* Journal of the American Medical Association (Chicago, Ill.), 240(7), 18 Aug 1978, 657-661. Engl. 20 refs.

Guidelines for feeding infants are given, based on the recommendations of the American Academy of Pediatrics. Breast-feeding and certain prepared feeds meet the recommendations, but evaporated milk, fresh cow's milk, and skimmed milk do not. Strained foods and cereals should be started when the child can eat from a spoon and swallow non-liquid foods, usually between the ages of 3-6 months, when lifelong eating patterns can begin. Adjustment of the energy intake to requirements and the introduction of a variety of foods should be the main objectives. (Modified journal abstract)

6547 **Zeigler, K.** *Neue Strategie der Malariabekämpfung. (New strategy for malaria control).* Zeitschrift für die gesamte innere Medizin und ihre Grenzgebiete (Leipzig, Germany FR), 33(13), 1978, 436-439. German. 35 refs.

Eradication of malaria has proved more difficult than the spectacular advances of the late 1950s would indicate, due, in part, to increased resistance of the vector and parasite to insecticides and chemotherapy. WHO is now advocating that countries exhibit greater flexibility in the choice of antimalarial measures, governed by economic considerations and the place of malaria within the total epidemiological situation. Current research is now being directed at new possibilities of malaria prevention that are both efficient and economical to apply. (Modified journal abstract)

III Health Care Implementation

III.1 Inpatient Care

See also: 6334, 6365, 6585, 6664, 6733, 6900.

6548 **Al-Khawashki, M.I.** *Anaesthesia in Saudi Arabia; development, problems, present status.* Middle East Journal of Anaesthesiology (Beirut), 5(3), Feb 1979, 149-154. Engl.

After tracing the history of anaesthesia services in Saudi Arabia, the author discusses the two major problems facing anaesthesiologists in that country: the refusal of surgeons to acknowledge their contribution to surgical operations (coupled with the surgeons' insistence on using the anaesthesiologist as a scapegoat for any problems occurring during or after surgery) and public misunderstanding of the anaesthesiologist's role. The 3-year training course for anaesthesia technicians is described and mention is also made of the recruitment of foreign anaesthesiologists and the establishment of intensive therapy units. (DP-E)

6549 **Angole, Y.E.** *Intensive care unit in the University Teaching Hospital, Lusaka; a retrospective study for the year 1975.* Medical Journal of Zambia (Lusaka), 11(5), 1977, 146-148. Engl.

A retrospective study was undertaken of cases admitted to the intensive care unit of the University Teaching Hospital, Lusaka, Zambia, in 1975. This paper describes the facilities and tabulates and discusses the reason for admission, management, and outcome of the 226 cases for whom records were available. The majority of patients were admitted for injury (140), with postoperative (56) and medical (30) reasons following. Head injuries accounted for the greater part of the injuries (85) and deaths (34 out of 70). It is hoped that this information will be of assistance to those planning to work in the unit, or to open similar units, in Zambia. Statistical data are included. (HC-L)

6550 **Armon, P.J., Alwani, M.A.** *Breech delivery and perinatal mortality.* East African Medical Journal (Nairobi), 55(12), Dec 1978, 558-567. Engl. 17 refs.

The authors review the management and outcome of breech delivery in the Kilimanjaro Christian Medical Centre, Moshi, Tanzania, from 1973-1978. During this time, there were 580 singleton breech deliveries, with a perinatal mortality of 162:1 000. A policy for the management of breech presentation suitable for a country such as Tanzania, where Caesarean section carries a high risk to the mother, is recommended. It emphasizes good antenatal care, referral to a specialist unit of all cases of breech presentation at 34 weeks, and external version where applicable. Persistent breech presentations should be delivered in hospital, with careful assessment on the advisability of vaginal or abdominal delivery. Statistical data are included. (Modified journal abstract)

6551 **Barss, P.G.** *Anaesthesia in ruptured ectopic pregnancy in Papua New Guinea.* Tropical Doctor (London), 9(4), Oct 1979, 227. Engl.

The author describes a technique he developed for anaesthetizing Papua New Guinean patients with ruptured ectopic pregnancies when the peritoneal cavity was grossly distended with blood and there was neither a skilled anaesthetist nor a blood donor available. The midline of the lower abdomen is infiltrated with local anaesthesia and the blood resulting from the incision is collected, filtered, and infused back into the patient. After the patient's circulation has been restored, she can then receive a light general anaesthetic and the surgery can continue. (DP-E)

6552 **Barten, J.** *Screening for infertility in Indonesia; results of examination of 863 infertile couples.* Andrologia (Berlin, Germany), 10(5), 1978, 405-409. Engl.

During a 5-year study, 863 infertile couples were examined by a simple screening procedure adapted to the facilities of a rural Indonesian hospital. Tubal obstruction, with an incidence of 45.4%, appeared to be the most prominent cause of infertility. The 2nd most important factor was semen quality, which accounted for 32.4%. Azoospermia was found in 12% of all semen samples and a sperm count below 5 million:ml in 8.7%. Disturbances in ovulation were responsible for 13% of infertility. Statistical data are included. (Modified journal abstract)

6553 **Baskett, T.F.** *University department's involvement with medical care in the Canadian North.* Canadian Medical Association Journal (Ottawa), 120(3), 3 Feb 1979, 298-300. Engl.

Both visiting consulting services and resident general practice services to the Churchill Health Centre in northern Manitoba (Canada) are provided by the University of Manitoba through its northern medical unit. The roles of the university's department of obstetrics and gynaecology with regard to visiting consulting services include inpatient care, education, and medical audit. This paper reviews the several aspects of this involvement from 1971-1977. Statistical data are included. (Modified journal abstract)

6554 **Collomb, H.** *Economie des villages psychiatriques. (Economic aspects of psychiatric villages).* Social Science and Medicine (Oxford, UK), 12(3-4C), 1978, 113-115. Fren.

Two Senegalese psychiatric villages modeled on the West African counterparts associated with traditional healers are described. Built using traditional styles of construction, the villages are inhabited by health staff (mainly psychiatric nurses), patients (up to 30 at a time), and their relatives. The aim of the treatment programme is to avoid separating the patient from the family and the familiar environment and to use community life as an active therapeutic agent. Drug therapy is also used. The cost of treatment is substantially less than that of psychiatric hospital care. (Modified journal abstract)

6555 **Gillis, L.S.** *Cape Town psychiatric service.* South African Medical Journal (Cape Town), 56(22), 24 Nov 1979, 970-973. Engl.

A comprehensive psychiatric service for Cape Town (South Africa) and a neighbouring rural catchment area is described to show how the facilities and services of the Department of Health, the Cape Provincial Administration, and the University of Cape Town function together. Their cooperation is based on the principles of planning in terms of the activities of a health team rather than individual personnel, developing specialized therapy units at different hospitals, and coordinating clinical activities. Community psychiatry is emphasized. The different units and their functions are discussed, as well as teaching and research activities. (Modified journal abstract)

6556 **Lennox, C.E., Pust, R.E.** *Surgical experience of tribal warfare in Papua New Guinea.* Tropical Doctor (London), 9(4), Oct 1979, 184-188. Engl.

The disruption of health services caused by tribal warfare in the Enga province of Papua New Guinea is discussed. In addition to a decrease in normal admissions because of their location in enemy territory, the only hospital's facilities were strained by having to treat 167 warriors who had sustained a total of 226 wounds, mainly from spears and arrows, which were often infected by the time the patients reached the hospital. Five case histories are presented to illustrate the variety of injuries encountered. (DP-E)

6557 **López, C.G.** *Organization of a blood transfusion service in tropical areas.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 10(2), Jun 1979, 177-183. Engl.

The development of a blood transfusion service in Malaysia can serve as a model for the planning of similar services in other developing countries. A sound organizational structure has been established, the technical aspects of blood banking have been improved and standardized, and public awareness of the concept of voluntary donation has been increased. Donor recruitment remains difficult, however, because of language and cultural barriers, scattered rural populations, and poor transportation. The prevalence of diseases such as haemophilia and hepatitis will place an even greater strain on blood transfusion services in the future and requires immediate consideration. (FM)

6558 **Odio, W., Mangalaboyi, L., Mbelepe, M., Ditu, M.** *Tétanos chez l'adulte à propos de 128 cas observés de 1960 à 1976 aux cliniques universitaires de Kinshasa. (Tetanus in adults; a review of 128 cases observed between 1960 and 1976 in the university clinics of Kinshasa).* Annales de la Société Belge de Médecine Tropicale (Brussels), 58(4), 1978, 347-354. Fren. Refs.

From 1950-1976, 128 cases of adult tetanus were observed in the university clinics of Kinshasa, Zaire. Treatment consisted of sedatives (association of diazepam, phenobarbitol, and chlorpromazine), heterologous serotherapy, portal of entry care, antibody therapy, caloric support, and careful nursing. A mortality of 28.9% was observed. The authors suggest that an assessment on the 3rd day of hospitalization of the degree of severity of each case and an earlier preventive tracheotomy in more serious cases might improve results. In addition, mass population immunization would decrease the incidence of tetanus. Statistical data are included. (Modified journal abstract)

6559 **Osorio, A., Ferrari, A.M., Alonso, R., Cardozo, N.** *Hospitalización conjunta del hijo con su madre—programa de madre participante. (Hospitalization of the mother with her child—the participating mother's programme).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 84(3), Mar 1978, 240-245. Span. 13 refs.

A programme involving the hospitalization of mothers with their sick infants has been adopted in a Uruguayan hospital with a view to eliminating the trauma of separating infant and mother, ensuring the best possible care for the child, reducing the risk of cross-infection, encouraging breast-feeding, and providing an excellent opportunity for health education. Evaluation revealed that, in addition to the aforementioned advantages, the programme has resulted in shorter stays and a reduction in hospital infant mortality. Rooming facilities for mother and child are described. (HC-L)

6560 **Raeber, C.** *Als Op-Schwester und Hebamme in Kamerun; Eindrücke und Erfahrungen im Grasland (Nordwestkamerun) während eines sechseinhalbmonatigen Aufenthaltes in einem auf 1800 m Höhe gelegenen Spital. (Theatre nurse and midwife in Cameroon; experiences and impressions of the Acha Tugi Hospital, Mbengwi, in the northwest Cameroon grasslands).* Sozial- und Präventivmedizin (Zurich, Switzerland), 24(2-3), May 1979, 169-171. German.

The author describes inpatient care and outreach activities of a rural hospital in Cameroon, focusing on the maternity ward, which includes a separate camp for prenatal stays; the operating theatre; the health centres; and the village health workers, known as "first aiders". These last are visited periodically by a health team from the hospital and the importance of the contacts thus created, including those with traditional practitioners, is stressed. (Modified journal abstract)

6561 **Sakalo, W.** *Barangwanath Hospital, 1978.* British Medical Journal (London), 1(6165), 17 Mar 1979, 739-740. Engl.

A British physician describes his stint in Baragwanath Hospital, a hospital for blacks from Soweto (South Africa). One of the best teaching hospitals in Africa, the occupancy rate for its 2 000 beds is 105% due to the hospital's policy of never turning away patients. The staff of 700, including 450 full-time doctors and 3 700 nurses, treats some 11 million outpatients and 85 000 ward cases each year. Despite these figures, there are staff shortages, mainly because government policy gives financial consideration to white hospitals. The hospital's departments are described. The author notes that another major problem is the lack of research facilities. (DP-E)

III.2 Outpatient Care

See also: 6334, 6349, 6354, 6362, 6555, 6560, 6606, 6607, 6648, 6718, 6733, 6737, 6749, 6753, 6754, 6832, 6846, 6902, 6953.

6562 **Arnon, A.** *Doctor-nurse team; comprehensive family care in a rural community.* Annals of the New York Academy of Sciences (New York), 310, 21 Jun 1978, 129-138. Engl. 12 refs.

A rural health centre at Nehora, Israel, that serves a scattered population of 2 160 is described. The centre is staffed by a physician and a chief nurse, who as a team supervise the activities of nurses in remote village clinics. The functions of each member of the team with regard to family and comprehensive, especially preventive, medicine are discussed. Evaluation of the team's efforts showed that the village nurses were capable of dealing with 85% of patient complaints and that the hospitalization rate in the area decreased 20%. Statistical data are included. (DP-E)

6563 **Buchan, T.** *Sibantubanye Day Centre.* Central African Journal of Medicine (Salisbury), 24(8), Aug 1978, 166-171. Engl.

A day centre for retarded children was started in Bulawayo, Rhodesia, with a view to teaching the children basic hygiene, self-care, and social adaptability and thus easing the burden on their families. This paper describes the clinical features, histories, and diagnoses of the 1st 20 children admitted to the centre and the results of their 1st 6 months there, as assessed by the Gunzburg rating scale. The need for parental education regarding the purpose of the centre, genetic counselling, and a reduction in the number of elderly multiparae (*vis-à-vis* Down's syndrome) are pointed out in the ensuing discussion. (HC-L)

6564 **Chopdar, A.** *Integrated child development services (I.C.D.S.) scheme: a new approach to (maternal and child health) services; its activities in Orissa.* Indian Journal of Pediatrics (Calcutta, India), 46(373), Feb 1979, 53-57. Engl.

In 1974, as part of its national policy for children, India inaugerated 33 experimental projects in health centres throughout the country. The projects consisted of a maternal and child health package including supplementary nutrition, immunization, check-ups, referral services, and nutrition and health education. This paper describes the staff required to implement the project in an urban, rural, and tribal situation and describes the activities and accomplishments of the Subdega Tribal Project, Sundergarh, Orissa. (HC-L)

6565 **Dayal, M.S.** *Integrated child development services.* Health and Population (New Delhi), 2(1), Jan-Mar 1979, 80-83. Engl.
See also entry 5109.

India's Integrated Child Development Services (ICDS) are intended to: improve the health and nutrition status of children aged less than 6 years; stimulate child development; reduce mortality, morbidity, malnutrition, and school drop-outs; and educate mothers in matters concerning child health and child care. The ICDS provides a package of services to children, pregnant women, and nursing mothers that includes nutrition supplements, immunization, preventive medicine, referral services, nutrition and health education, and non-formal preschool education. The programme is staffed mainly by female village health workers. (DP-E)

6566 **Dhillon, H., Dhanoa, J., Cowan, B.** *Reaching the child in need.* Health and Population (New Delhi), 2(1), Jan-Mar 1979, 5-25. Engl.

The recording system used by the staff of the Community Health Programme of the Christian Medical College, Ludhiana, India, is described. By means of this system, both malnourished and at-risk children can be identified and a preventive programme consisting mainly of nutrition education of mothers in the home can be implemented when the children are about

5 months of age. A survey of 123 infants who had benefited from 6 months of this programme revealed that complete compliance was achieved in 82% of these cases and that their nutritional status was greatly improved with regard to that of a control group, especially among female infants. Statistical data are included. (DP-E)

6567 **Dickson, P.** *Su Clinica Familiar, Harlingen, Texas.* Public Health Reports (Rockville, Md.), 94(4), Jul-Aug 1979, Suppl., 56-63. Engl.

In 1971, *Su Clinica Familiar*, the largest National Health Service Corps (NHSC) site, opened in Harlingen, Texas (USA) with the help of local volunteer doctors; it is now staffed by 10 NHSC physicians, 2 dentists, and a number of nurse-midwives who provide family health services to some 90 000 predominantly Mexican American patients annually. The clinic's activities and the background of some of its staff are described. Judged from community and staff reaction, the clinic is an eminently successful example of how to deliver quality medical care to a large number of poor people. (DP-E)

6568 **Emery, G.M.** *Philippines: Rizal.* In Hetzel, B.S., ed., Basic Health Care in Developing Countries; an Epidemiological Perspective, Oxford, UK, Oxford University Press, 1978, 63-75. Engl.

For complete document see entry 6343.

A pilot project in Rizal province in the Philippines reorganized rural health units to improve efficiency and increase coverage by existing personnel. A major problem was the underutilization of auxiliary health workers. Personnel categories were redefined to reflect three levels: a basic level to deal with simple, minor problems; a 2nd level to handle more difficult problems and supervision; and a 3rd level to consider all referred cases. The major innovation at the 1st level was the establishment of primary care clinics staffed by retrained midwives. In more remote areas, *barangay* health workers were trained to provide information on environmental sanitation, basic first aid and case-finding, maternal child health, health education, and agricultural production. (FM)

6569 **Gerber, M.S.** *Successful medical radio network in East Africa.* Development Communication Report (Washington, D.C.), (30), Oct 1980, 4, 15. Engl.

Since 1961, the African Medical and Research Foundation (AMREF) has operated a medical radio network that now has 93 stations at both government and mission-run facilities in Kenya, Tanzania, the Sudan, and Uganda. Isolated stations without telephones or reliable transportation use the system to communicate with the central station in Nairobi and with one another for clinical consultations, discussing community health problems, ordering drugs and supplies, transmitting laboratory reports, settling administrative matters, and arranging flying doctor visits. This article examines the issues of equipment and maintenance, operation and personnel, the use of radio, and management and evaluation. (DP-E)

6570 **Gill G.V.** *Asthma clinic for provincial tropical hospitals.* Tropical Doctor (London), 9(4), Oct 1979, 155-157. Engl.

A method of outpatient care for asthmatics that reduces morbidity and utilizes facilities generally available in provincial tropical hospitals is described. The equipment and drugs needed for a monthly clinic staffed by a physician and an auxiliary are listed. Basic pharmacological and clinical principles for patient management are outlined. An evaluation of a similar asthma clinic in Chingola, Zambia, revealed a reduction in visits from 3.7-1.4 per person and days off work from 3.0-1.2 per person. Tables present the basic principles in the management of asthma and a flow chart of patient management at the asthma clinic is included. (DP-E)

6571 **Goldschmidt, D., Hudson, H.E., Lynn, W.** *Two-way radio helps deliver primary health care.* Development Communication Report (Washington, D.C.), (30), Oct 1980, 1-3, 15. Engl.

The suitability of two-way radio systems as an aid to communications between different levels of health care facilities is discussed. The radio can be used for consultations and diagnosis, teaching, discussing matters of common interest, and arranging visits and evacuations. The basic components of any two-way system are a transceiver (a transmitter/receiver) and a power supply. The various types of two-way radio technologies (high frequency, very high frequency, and citizen's band) are examined and some of the problems outlined; recommendations are made for setting up a two-way system. (DP-E)

6572 **Hui, A., Devi, S., Lo, K., Ng, Y.K.** *Ambulatory tuberculosis treatment in government outpatient dispensaries in Singapore.* Annals of the Academy of Medicine (Singapore), 7(1), Jan 1978, 4-7. Engl.

In 1974, a decision was made to integrate tuberculosis case-finding and treatment with the primary care services offered in 26 government dispensaries strategically located in various parts of Singapore. In a 1-year pilot study using six of the centres, 268 patients received routine ambulatory treatment; of these, 1 died, 5 defaulted, and 8 had persistent positive sputum after 12 months. This low failure rate (5.2%) confirms the validity of ambulatory treatment of pulmonary tuberculosis patients and is attributed, in part, to the convenience and ease of obtaining treatment near home and the good rapport between dispensary staff and the community. Statistical data are included. (HC-L)

6573 **Islam, N.** *Helminthiasis and anaemia in rural Bangladesh.* Tropical Doctor (London), 9(4), Oct 1979, 158-160. Engl.

Recommendations are made concerning the treatment of helminthiasis and anaemia in rural Bangladesh. Mebendezale is the suggested anthelminthic because of its pleasant taste and lack of side effects; other possible drugs are also listed and described. The causes of anaemia and the treatments for each type are discussed. Because of the expense and unavailability of commercial iron and vitamin supplements, natural and locally available sources of these nutrients are recommended. A convenient table lists vitamin deficiencies, their symptoms, food sources, and therapeutic doses. (DP-E)

6574 **Kennedy, I., Stephens, B.** *Novel antenatal record to help midwives.* Practitioner (London), 223(1333), Jul 1979, 18-24. Engl.

A model card for recording antenatal care given by midwives in Botswana is presented and described. The card includes a questionnaire and a graph for plotting fundal height and maternal weight that, when properly used, can give a clear warning of an abnormal, high-risk pregnancy. Sample graphs demonstrating fetal hydramnios, pre-eclamptic toxaemia, and maternal weight loss are included. (DP-E)

6575 **Klein, H., Mester, R., Breyter, C., Last, U.** *Programme for the establishment and functioning of a community mental health service in the area of Beit Shemesh and the Jerusalem Corridor, Israel.* Mental Health and Society (Basel, Switzerland), 5(1-2), 1978, 94-100. Engl.

The authors describe the development of a community psychiatry programme based at the Comprehensive Mental Health Clinic in Beit Shemesh, Israel. The programme provides consultation services, family therapy, community work, and direct psychiatric treatment. A major problem area was found among families of North African and Asian origins who encountered difficulty in adapting to Israeli society. In general, family contact was maintained by the public health nurse in consultation with the mental health centre, although family and multi-family therapy sessions were also provided. Secondary school students were recruited to work with the children of these families and a school psychological counselling service was established. (FM)

6576 **Lehmann, P.E.** *Hazard, Perry County, Kentucky.* Public Health Reports (Rockville, Md.), 94(4), Jul-Aug 1979, Suppl., 25-32. Engl.

Hazard Family Health Services, one of four major health care systems serving the Eastern Kentucky (USA) coalfields, began in 1972 as an outreach programme aimed at reducing the high infant mortality in that part of Appalachia. Today the system includes adult and pediatric clinics adjacent to the Applachia Regional Hospital in Hazard and in three small towns within a 30-mile radius. These four facilities serve about 25 000 patients each year, while nurses and social workers still canvas the area in jeeps, visiting 300-400 infants regularly. The staff now includes three doctors, a physician's assistant, and a nurse practitioner who are all members of the National Health Service Corps, although, as in most areas, attracting and keeping physicians is still a problem. (Modified journal abstract)

6577 **Mackenzie, P.** *Delivery of basic health care by the Calabar Rural Maternal-Child Health-/Family Planning Program (Nigeria).* New York, Population Council, Working Paper No. 6, Jun 1979. 23p. Engl.

The Calabar Maternal Child Health (MCH) and Family Planning Project (Nigeria) is described and evaluated. It aimed to develop a replicable system of health care delivery of MCH services, including family planning, to all mothers and children in the project area. Project activities were divided into these phases: planning, strengthening existing services, training new health personnel, extension of services, and documentation. Suggestions gleaned from project experience are offered. Appendices list project staff, types of medical records, and types of project contributions, including facilities, equipment, supplies, transport, services, training activities, and research evaluation studies. (DP-E)

6578 **Ortin, E.L.** *Leveriza Project—a demonstration of primary care nursing.* Philippine Journal of Nursing (Manila), 48(4), Oct-Dec 1978, 128-131. Engl.

In 1974, the Leveriza Project was organized in Manila (the Philippines) to study the feasibility of a nursing clinic managed by community nurse practitioners and its acceptance by the community. The staff and operation of the clinic are described. The outcome of the project is examined in terms of the nurse-physician team concept, the concept of patient responsibility, nursing services rendered, competency needs, and broadening the scope of nursing. It is recommended that further studies be carried out on the acceptability of community nurse practitioners, safety factors in their practice, their ability to adjust to an expanded role, the financial viability of these clinics, development of appropriate training programmes, etc. (DP-E)

6579 **Perlmutter, F.D.** *Consultation and education in rural community mental health centers.* Community Mental Health Journal (New York), 15(1), 1979, 58-68. Engl. 11 refs.

This paper reports on the status of consultation and education in 13 rural community mental health centres in Pensylvania, Delaware, Virginia, and West Virginia (USA). The organization of the rural programme is compared to that of urban programmes and discussed in terms of ideology, the dominant medical model, financial support, and the political context. A case history of a successful consultation-education service is presented. Possible strategies for improving rural mental health services include encouraging community participation and proper recruitment and training of professional personnel. (DP-E)

6580 **Povey, G.** *Management of infertility in a community health centre.* East African Medical Journal (Nairobi), 55(10), Oct 1978, 482-488. Engl.

A community health centre can manage the problems of infertility in a systematic and satisfactory way in spite of limited resources. Counselling is of major importance. The couple's general health status should be investigated. Standard methods of studying sperm production, transport, and delivery, the status of cervix, uterus, and tubes and ovulation are described. Induction of ovulation with clomiphene is a recommended method but its use entails calculated risks. (Modified journal abstract)

6581 **Rapoport, D.** *Fort Peck Reservation, Montana.* Public Health Reports (Rockville, Md.), 94(4), Jul-Aug 1979, Suppl., 39-47. Engl.

The US Indian Health Service provides free health care to Indians on and around the Fort Peck Reservation in northeastern Montana. In 1978, a new health centre including an outpatient clinic and administrative offices was opened in Poplar, with a branch clinic in Wolf Point. Backed up by community hospitals, the two clinics serve some 50 000 patients per year. The regular staff includes physicians, dentists, an optometrist, two pharmacists, a medical technologist in charge of a laboratory, an X-ray technician, nurses, dental assistants, field health personnel, a health educator, and mental health and social workers. They can provide, without referral, emergency services and medical, obstetrical, pediatric, and minor surgical care. (Modified journal abstract)

6582 **Schnellmann, E.W.** *Gesundheitspflege als Randproblem. (Health care as a marginal issue).* Sozial- und Präventivmedizin (Zurich, Switzerland), 24(2-3), May 1979, 208-212. German.

Recognizing that the need for health services is only a part of the larger need for development, Swissaid's activity in the Third World tends to focus on the agricultural sector, with medical projects occasionally undertaken as stimuli for overall social development. This paper describes two such projects in India—rehabilitation in a leprosy colony and a mobile eye unit—and how they functioned as a point of departure for self-help activity on the part of their beneficiaries and the community as a whole. (Modifed journal abstract.)

6583 **Srouji, E., Connolly, C.** *Role of a department of pediatrics in a village comprehensive health care program.* Courrier (Paris), 29(4), 1979, 333-339. Engl. 18 refs.

The Ghaziyye Health Centre, Lebanon, allows physicians specializing in social and preventive pediatrics at the American University in Beirut to experience community pediatrics in a semirural setting. This paper describes the centre facilities and organization, the demographic and vital characteristics of the population served, and the results of selected surveys of the same. It is suggested that the centre would be suitable for the training of auxiliaries as well. (HC-L)

6584 **Tuli, J.** *Child care has changed in Kasai Mohalla.* Nursing Journal of India (New Delhi), 70(4), Apr 1979, 104-105. Engl.

Case histories of the successful deliveries of two young women, both of whom had previously lost a child at birth, are used to illustrate the impact of the local health centre on Kasai Mohalla, a community of butchers residing within Najafgarh, India. Also serving as a training centre for public health nurses, lady health visitors, paramedics, and medical students, the centre provides antenatal and postpartum care, assistance during delivery, daily outpatient services for 500 patients, and health education. The comments of a traditional midwife also emphasize the improvements the health centre staff have effected. (DP-E)

6585 **Wallis, R.** *In Kabulamema.* Saving Health (London), 18(4), Dec 1979, 10-13. Engl.

The facilities and staff of the Kabulamema Mission Health Centre (Zambia) are described. The centre's prime function is preventive medicine, including health and nutrition education, antenatal and child health care, immunization, and other disease control measures, although there are beds for some 20 inpatients as well. Approximately 150 outpatients are treated daily. The activities of a typical day as well as the centre's weekly routine are outlined. (DP-E)

III.3 Mobile Units and Services

See also: 6582, 6641, 6742.

6586 **Furnas, D.W., Gilchrist, D., Rees, T.D., Wood, A.M.** *Surgical safaris with the East Africa Flying Doctor Service.* Archives of Surgery (Chicago, Ill.), 114(10), Oct 1979, 1143-1148. Engl.

The East Africa Flying Doctor Service, a unit of the African Medical and Research Foundation, has for 20 years provided specialized medical service to bush hospitals in Kenya and Tanzania. This article describes the organization of the flying doctor service and discusses and illustrates with photographs the unique types of surgical problems likely to be encountered in Africa. The relationship between traditional and Western medicine is also considered. (DP-E)

6587 **Morley, D.C.** *Accurate weighing scale for all ages.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 72(4), 1978, 433. Engl.

This paper describes and illustrates an accurate but sturdy portable weighing scale that can be used in medical surveys of adults and, with the addition of a small hammock that slots into the platform, infants and small children. The mechanism is easily accessible, should maintenance be required, and contains no complicated parts that could cause problems. (HC-L)

6588 **Wood, A.M.** *Flying doctor services.* Injury (Bristol, UK), 10(3), Feb 1979, 170-174. Engl.

Flying doctor services are invaluable in providing medical care to those living in remote areas. The author outlines the variety of functions performed by flying doctors, including emergency medical aid, evacuation of patients to central hospitals, specialized surgery, maintenance of routine outpatient clinics, and the delivery of drugs and equipment. He discusses the advantages and disadvantages of helicopters over traditional aircraft and reviews the economic aspects of providing medical services by air. He concludes by providing information on establishing and maintaining such a service, emphasizing the importance of preliminary assessments, selection of sites, and allocation of financial resources. (FM)

6589 **Wright, J.** *Chirugie foraine au Niger, Département de Niamey. (Mobile surgery in Niger, Niamey district).* Afrique Médicale (Dakar), 18(166), 1979, 27-29. Fren.

From 1976-1977, 652 minor surgical interventions were performed by a mobile team of two retired surgical nurses in the health centres of four *arrondissements* in the district of Niamey, Niger. This paper discusses the cost and advantages of the mobile surgery. These include the fact that it is less expensive per day than hospital surgery, it eases the congestion in hospital surgeries, patients are spared the expense and psychological strain of travelling far from home, and health centre staff enjoy increased respect because of their participation in the operation. (HC-L)

III.4 Health Education

See also: 6304, 6379, 6381, 6395, 6658, 6659, 6662, 6680, 6836, 6866, 6961.

6590 **Armstrong, H.** *Helping mothers to breastfeed (2).* AFYA (Nairobi), 13, Nov-Dec 1979, 164-168, 170-171. Engl.
See also entry 6690.

Specific examples of breast-feeding problems and their management are presented to illustrate ways in which health centre staff can help mothers to maintain an adequate or re-establish a failing milk supply. Examples of how breast-feeding can be encouraged in the clinic waiting room and during consultation are also given and a simple checklist for testing a clinic's breast-feeding programme is included. (HC-L)

6591 **Baur, W.** *Präventiv Aspekte und Probleme eines ländlichen Gesundheitsprojektes im Tschad—das Bedürfnis nach Gesundheitsanimation. (Preventive aspects and problems of a rural health project in Chad—the need for health motivation).* Sozial- und Präventivmedizin (Zurich, Switzerland), 24(2-3), May 1979, 167-169. German.

This paper discusses in general and with reference to the author's personal experience in Chad some practical aspects of health promotion at the community level, e.g., the training and utilization of community health workers (and the thorny question of their remuneration) and the education and mobilization of the community for participation in preventive health measures. (Modified journal abstract)

6592 **Bhandari, U., Bhandari, V.** *Public health education through primary health centres.* Nursing Journal of India (New Delhi), 70(6), Jun 1979, 142-144. Engl.

The authors discuss the planning and implementation of public health education programmes in rural primary health centres in India. Initial contact should deal primarily with the patient's own particular ailment, motivating him or her to carry out certain practices to provide relief from the illness. Once a rapport has been established, general education about family and community health problems can begin. The educational opportunities of various situations at health centres, such as the registration counter, the waiting room, the doctor's examining room, and the maternity section, are outlined along with activities to be undertaken, teaching methods, audiovisual aids, and health personnel involved. (FM)

6593 **Boada, H.O.** *Ecuador: health teaching in rural primary schools.* International Journal of Health Education (Geneva), 22(1), Jan-Mar 1979, 56. Engl.
Also published in French, German, and Spanish.

In a joint action in Ecuador, the ministries of health and public education, with PAHO assistance, have launched an experimental programme to improve the teaching of health in rural primary schools. These results were achieved in Rumipamba, the 1st of 42 pilot projects, in 60 days: teachers and community leaders received 60 hours of classroom instruction in disease control and vaccinations, nutrition, sanitation, maternal child health, and hygiene and first aid; a dental health programme was organized for 200 1st grade pupils; a medical care programme was implemented for 320 students in the 1st and 6th grades; and 170 local families were surveyed to identify major health problems. (DP-E)

6594 **Flavier, J.M.** *Philippines: rural reconstruction.* In Hetzel, B.S., ed., Basic Health Care in Developing Countries; an Epidemiological Perspective, Oxford, UK, Oxford University Press, 1978, 75-86. Engl.

For complete document see entry 6343.

The People's School, organized by the International Institute of Rural Reconstruction, is an integral part of rural development in the Philippines. Opened in 1975, the school's long-range objective is to raise the economic and social standards of rural people by encouraging self-help and community participation. It has developed a curriculum to train villagers to serve as diffusers of technological information on agricultural production, health education, family planning, nutrition, literacy, and village leadership. Selection of villagers, follow-up, and supervision are discussed. Results of the courses have been encouraging, although some problems still remain, such as lack of adequate back-up support and funds. (FM)

6595 **Gopaldas, T.** *Supplementary feeding programmes; the case for programme information and nutrition education support.* Food and Nutrition (Rome), 4(1-2), 1978, 15-19. Engl.

This paper presents arguments in support of the statement that programme information and nutrition education are absolutely necessary adjuncts to supplementary feeding programmes. Examples are taken from India's largest nutrition programmes. The development of the content, media, and communications techniques is dicussed; the three major communications techniques were the personal approach (take-home food, growth charts, etc.), mass media of various types, and demonstration of the feasibility of nutritional rehabilitation in the home as a means of educating the mother and the community. Also covered were programme implementation, evaluation of the education component, project costs, and some lessons for developing countries. (DP-E)

6596 **Hall, B.L.** *Tanzania's health campaign.* Washington, D.C., Clearinghouse on Development Communication, Information Bulletin No. 9, Jun 1978. 74p. Engl. Refs.

See also entry 1676 (volume 3).

In 1973, some 75 000 radio study groups were formed throughout Tanzania in order to listen to and discuss the series "Man is Health" and, on the basis of the programme and discussion, to decide what types of relevant action to take. This report describes the origins, planning, preparation, production, and evaluation of the "Man is Health" campaign, which, on the basis of one activity alone—the building of 750 000 latrines—can be considered an unequivocal success in moving groups from discussion to action. Statistical data are included. (HC-L)

6597 **Heredia-Duarte, A.** *Educación para la salud en el programa de control de la rabia en México, 1979. (Health education in the rabies control programme in Mexico, 1979.)* Gaceta Médica de México (Mexico City), 116(9), Sep 1980, 388-390. Span.

In Mexico, some 70-90 individuals die every year from rabies and another 47 000 are vaccinated against the disease at considerable expense. The national rabies control programme aims to prevent the disease through the vaccination of all pet dogs (an estimated 5.8 million) and the elimination of all strays (an estimated 650 000). Since public support is essential to the successful implementation of these measures, the government has prepared a package of educational materials including filmstrips suitable for showing on television or in movie houses, a newspaper insert, and a unit for use in primary schools. Since there are approximately 14.7 million primary schoolchildren in Mexico, the last is expected to reach the largest audience and to have the farthest-reaching results. (HC-L)

6598 **Isely, R.B., Sanwogou, L.L., Martin, J.F.** *Community organization as an approach to health education in rural Africa.* International Journal of Health Education (Geneva), 22(3), Jul-Sep 1979, Suppl., 1-19. Engl. Refs.

Also published in French, German, and Spanish.

Successful health education programmes from various developing countries are described and a project begun in 1973 in four rural villages in Cameroon is examined in detail. This project aimed to: establish a model structure, the village health committee, in each of the target villages; train auxiliary nurses as visiting health workers; replicate the committee model in other villages; and extend the approach to primary schools in the target area. Each aspect of the project is discussed at length, with emphasis on the implications for overall development and for national health planning and services. (DP-E)

6599 **Loume, M., Autret, E., Wone, I., Borel, G., de Lauture, H.** *Evaluation d'une action de médecine de développement au Sénégal. (Evaluation of a community-based medical programme in Senegal).* Afrique Médicale (Dakar), 17(164), 1978, 641-644. Fren.

The mission-run health post in Guinguineo, Senegal, has encouraged rural people to participate in their own health care since 1964. These efforts are reflected in the results of a recent evaluation, which showed that individuals from Guinguineo are more knowledgable about health matters than are individuals from control villages, that 80%-95% of children aged less than 5 years in Guinguineo attend the child health clinic, and that infant mortality in Guinguineo is far below the national rate (75:1 000 as opposed to 300:1 000). This paper describes the post's educational activities and, briefly, three collective projects undertaken in the area—latrine construction, construction of a maternity ward, and creation of a group pharmacy. (HC-L)

6600 **Malarkey, L.M.** *Ridding schoolchildren of parasites—a community approach.* MCN (New York), 4(6), Nov-Dec 1979, 363-366. Engl. 9 refs.

A school nurse who participated in a Headstart Program in rural Puerto Rico (USA) describes the efforts she and other school staff made to cure the participating children of a variety of parasitic diseases. While treatment programmes and health education for both parents and children were effective and well-received, the nurse's attempt to obtain the support of local authorities for housing and sanitation programmes, essential if the children were not to be reinfected, met with no response. The life cycles and symptoms of roundworm, whipworm, and hookworm are discussed. (DP-E)

6601 **Mercado, C.M.** *New media techniques for the nutrition program.* Philippine Journal of Nutrition (Manila), 30(4), Oct-Dec 1977, 150-156. Engl. 8 refs.
Joint Annual Convention of Dieticians and Nutritionists, Quezon City, Philippines, 29 Jun 1977.

After discussing some of the difficulties of mass campaigns aimed at the rural poor (many of them due to the misconceptions of planners and decision-makers about the target audience), the author presents several new media techniques for use in nutrition education in the Philippines. These techniques include: harnessing the folk media, or indigenous forms of communication such as poems, riddles, songs, etc.; giving greater attention to males, who usually decide how much money will be spent on food; greater use of videotape and comics; increased community participation in the creation and evaluation of audiovisual materials; and more realistic illustrations. A list of eight recommendations is set forth. (DP-E)

6602 **Naik, V.R., Jain, P.K., Sharma, B.B.** *Utilization of audio-visual aids by family welfare workers.* Journal of Population Research (New Delhi), 4(1), 1977, 43-58. Engl.
WHO/SEARO Workshop to Develop and Pretest a Manual for Audio-visual and Mass Communication Strategies in Support of Family Health Education, New Delhi, India, Oct 1976.

Data on the utilization of audiovisual aids by Indian health and family welfare workers at the village, block, and district levels were solicited by means of a mailed questionnaire. Analysis of the 690 responses revealed that: the majority of workers at all three levels preferred individual contact to either group meetings or a mass approach; the majority of workers use aids sometimes, when available; and the reasons for not usng aids were that the workers were not oriented toward their use, that aids were not readily available, and that aids were heavy or fragile. Greater emphasis on the use of aids during training is advocated. (HC-L)

6603 **Owie, I.** *Socioeconomic differentiation in health knowledge of primary schoolchildren.* Tropical Doctor (London), 12(3), Jul 1982, 139-140. Engl.

In order to determine whether socioeconomic status affects health knowledge in schoolchildren, 37 5th grade boys from an elite primary school in Benin City, Nigeria, and 35 5th grade boys from a lower-class school in the same city were surveyed using a modified version of the Health and Safety Education Test (Crow and Coretta, 1960). Neither school had a health education programme, but the elite school provided such preventive health facilities as urinals and washbasins. The higher socioeconomic group scored significantly higher on the test than did the low. The need for health education programmes in all schools is emphasized. (HC-L)

6604 **Ross, D.** *Health by the people in Sierra Leone, West Africa.* Oxford Medical School Gazette (Oxford, UK), 30(2), 1978, 41-45. Engl. 10 refs.

A low-cost primary health care system that is based on the principles of self-help has been set up in three villages served by a rural hospital in Sierra Leone. The system involves the formation of health committees, comprising respected people who have been active in community affairs in the past and whose members take responsibility for various activities—environmental health, health education, gathering of statistics, etc. The committees meet once or twice a month with hospital staff to air grievances, to receive health education, and to identify health priorities. The 1st year's progress, which has been promising, is reviewed in this paper; a longitudinal evaluation of the project, based on changes in health statistics and health parameters, is to continue for the next 5 years. (HC-L)

6605 **WHO, Brazzaville.** *Role of mass media in promoting primary health care.* Brazzaville, WHO, 1979. 40p. Engl.
First Working Group on the Role of Mass Media in Promoting Primary Health Care, Gaborone, Botswana, 8-12 Oct 1979.

Under the auspices of WHO and UNICEF, the 1st working group meeting on the role of mass media in promoting primary health care was held in Gaborone, Botswana, in October 1979. The role of the mass media in primary health care activities is reviewed and suggestions are made for a more effective use of the media. It was concluded that politicians, policy-makers, and planners must be motivated to allocate more resources to the rural majority and that the rural communities should be encouraged to participate in solving their own health problems; these objectives require the education of mass media personnel and health workers. (DP-E)

III.5 Appropriate Technology

See also: 6372, 6391, 6440, 6537, 6551, 6569, 6571, 6670, 6685, 6696, 6699, 6706, 6725, 6784, 6952.

6606 **Bewes, P.C.** *Pin and two pieces of string.* Saving Health (London), 18(4), Dec 1979, 3-6. Engl.
See also entries 4604, 4605, 4606, 4607, 4608, 4609, 4610, 4611, and 4612 (volume 7).

An experienced missionary surgeon deplores the fact that many Western physicians, trained in the use of and accustomed to sophisticated equipment, have never learned a number of techniques, suitable for use in developing countries, that make such equipment unnecessary. Examples given include the use of domestic carbon steel knives instead of dermatomes for taking skin grafts, closed treatment of fractures, the use of nylon fishing line instead of more expensive sutures, and simple methods of administering anaesthesia. Many Tanzanian medical assistants have been successfully trained to practice these techniques. (DP-E)

6607 **Curnock, D.A.** *'Road to health'—child health in developing countries.* Midwife, Health Visitor and Community Nurse (London), 15(9), Sep 1979, 350-352, 354. Engl.

Under-fives clinics are suggested as the best solution to the child health problems of Nigeria and other developing countries. These clinics provide preventive care in three important ways: health education, immunization, and regular weighing. While clinic staff must rely upon their ingenuity to ensure that no mother leaves the clinic without having learned something, the *Road to Health Chart* provides a handy immunization schedule and a growth chart that, properly completed, gives early warning of malnutrition. The use of the *Road to Health Chart* is explained. (DP-E)

6608 **Harrison, P.** *Home-grown foods.* World Health (Geneva), Aug-Sep 1979, 4-9. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

A self-help nutrition project in the village of Beriharjo, Indonesia, has increased food production and greatly improved nutrition in the area. Among the innovations introduced by the villagers were a goat herd, fish tanks for breeding, and vegetable gardens. This village is typical of the new approach to rural development directed at reducing reliance on foreign aid and food shipments. Research is being done on ways to increase food production by small farmers, improve crop storage, and improve the nutritional quality of food consumption. (FM)

6609 **Piachaud, D.** *Diffusion of medical techniques to less developed countries.* International Journal of Health Services (Westport, Conn.), 9(4), 1979, 629-643. Engl. 14 refs.

A questionnaire was sent to 85 less developed countries to find out which of the following recent innovations in medical technology had been introduced in them: ultrasonic fetal examination, fiberoptic endoscopy, cardiac catheterization, computerized axial tomography (EMI scanner), renal dialysis, cobalt isotopes for radiotherapy, open-heart surgery, and laser beam therapy. Forty-seven percent of the countries responded; of these, seven had none of the techniques and three had all. This paper presents and analyzes the response data and raises some important questions regarding ths application of resources: what will the techniques cost in terms of supplies, spare parts, servicing, skilled manpower to operate them, and, if diagnostic, the treatment indicated by the results; how many people will the technique serve and, taking into account its probable effectiveness, benefit; and how many people would be served and benefited through alternative use of the same resources? (HC-L)

6610 **Pizarro, D., Posada, G., Levine, M.M., Mohs, E.** *Oral rehydration of infants with acute diarrhoeal dehydration: a practical method.* Journal of Tropical Medicine and Hygiene (London), 83(6), Dec 1980, 241-245. Engl. Refs.

Because oral rehydration by conventional methods is difficult in minimally staffed rural health centres, this alternative method was tested in a Costa Rican hospital: all the required glucose/electrolyte solution was given in one bolus, followed by all the free water in a ratio of 2:1, to 50 children aged less than 2 years with acute diarrheal dehydration. The results are discussed and presented as statistical data. The experimental method was found to be simple and practical, while still providing free water to prevent or correct hypernatraemia. (DP-E)

6611 **Reiter, P.** *Expanded polystyrene balls: an idea for mosquito control.* Annals of Tropical Medicine and Parasitology (London), 72(6), 1978, 595-596. Engl.

Expanded polystyrene balls, now commonly used for packing and insulation, might provide a simple, inexpensive, and relatively permanent method of reducing the breeding potential of *Culex pipiens fatigans*, a filariasis vector. Placed in a 3-5 c layer on the surface of water protected from the wind (e.g., a cesspool or a pit latrine), the balls kill the *C. p. fatigans* larvae by anoxia. Their material is readily available in many countries and expansion of the plastic could be effected close to the target sites by cooking the pre-expanded beads in boiling water in an open vat. (HC-L)

6612 **Schulz-Key, H.** *Simple technique to assess the total number of onchocerca volvulus microfilariae in skin snips.* Tropenmedizin und Parasitologie (Stuttgart, Germany FR), 29(1), 1978, 51-54. Engl. 8 refs.

A technique for the assessment of the total number of microfilariae in skin snips from onchocerciasis patients is described. For the digestion of the skin tissues, the biopsies are incubated at room temperature for 24 hours in medium 199, containing 3 mg:ml collagenase and antibiotics. This process leaves the microfilariae unharmed. A comparative study of the emergence of the microfilariae in different media showed that only

20% of the total number were released after 30 minutes in distilled water. After 24 hours' incubation in isotonic saline, 80% were found. Statistical data are included. (Modified journal abstract)

6613 **Sinha, D.P.** *Oral rehydration in diarrhoel diseases: a simple solution to a complex problem.* Cajanus (Kingston, Jamaica), 12(3), 1979, 138-149. Engl. 19 refs.

The fundamental long-term solution to the problem of gastroenteritis in the Caribbean and other developing regions would require multifaceted action emphasizing clean water, sanitation, personal hygiene, infant feeding, and health education. Meanwhile, the best short-term solution for children with diarrhea, which can result in death due to dehydration, is oral rehydration. This article describes an oral rehydration solution, recommended by WHO, that can be constituted in an emergency from supplies common to most Caribbean kitchens: 3.5 g sodium from table salt, 2.5 g sodium bicarbonate from baking soda, 1.5 g potassium chloride from coconut water, and 20.0 g glucose from sugar in 1 litre of water. (DP-E)

6614 **Suckling, J.G., Hunter, P.B.** *Simple method of assessing community orthodontic needs.* Australian Dental Journal (Sydney), 23(5), Oct 1978, 407-409. Engl.

A method based on a survey of 336 children in Fiji is described for making measurements of occlusions and converting these results into a form that permits an assessment of the community's need for orthodontic treatment. Called the 2F method, the technique involves measurements of the incisal overjet and crowding, which are used to produce a score related to the severity of the malocclusion. The authors stress that, since the 2F method is not meant to determine the need for individual treatment, it can be used by anyone accustomed to working in the mouth, i.e., dental hygienists and other dental auxiliaries. (DP-E)

6615 **WHO, Geneva.** *Action programme on essential drugs.* WHO Chronicle (Geneva), 33(6), Jun 1979, 203-208. Engl.

Also published in French, Russian, and Spanish.

The action programme on essential drugs is a global programme of international cooperation initiated by WHO to strengthen the national capabilities of developing countries in the selection, supply, and proper use of essential drugs and in their local production and quality control, wherever feasible. The immediate aim of the programme is to make essential drugs and vaccines available under favourable conditions to developing country governments. The activities being carried out in each WHO region are described. (DP-E)

IV Health Workers—Training and Utilization

IV.1 Medical Personnel

IV.1.1 Professional

See also: 6318, 6326, 6411, 6704.

6616 **Blizard, P.J., Blunt, M.J., Alibazah, P., Husin, M.** *Introducing instructional objectives in Indonesian medical schools.* Medical Education (Oxford, UK), 12(4), Jul 1978, 273-281. Engl. 8 refs.

A series of 2-week workshops was held to help some 600 Indonesian medical academics to acquire skills in constructing educational objectives for specific courses and to develop positive attitudes toward the use of these skills in curriculum design and planning. The instructional model chosen and the reasons for its effectiveness are examined. It is concluded that the development of basic educational skills can be acquired in a relatively short, condensed workshop by a large number of participants and that concepts of modern educational technology are acceptable in a sociocultural context with different practices and traditions from those within which most applications of educational technology have been achieved. The implications for developing countries are considered. (Modifed journal abstract.)

6617 **Cassata, D.M., Clements, P.W.** *Teaching communication skills through videotape feedback: a rural health program.* Biosciences Communications (Basel, Switzerland), 4(1), 1978, 39-50. Engl. Refs.

As part of an educational programme for rural health care, senior medical students sent to rural US communities are taught communications skills through the use of videotape feedback. The importance of communications skills training is discussed and the educational process described. The Medical Interview Skills Checklist, which is included in this article, was used to assess student performance during videotape playback. Student responses to and evaluation of the training are given. That such training and the rural experience can improve delivery and quality of rural health care is the major implication drawn. (Modified journal abstract)

6618 **Hershberger, R.D., Wingerson, L.** *Medicine with a mission.* Medical World News (New York), 24 Dec 1979, 29-34, 36. Engl.

The history of medical missionary services is discussed and some of the problems and accomplishments of missionary physicians are examined. Case histories are used to illustrate the contributions of missionaries to Third World medicine, including those of an ophthalmologist working in Pakistan, an anonymous general practitioner serving in an African country that cannot be named because several missionaries have recently been murdered there, a plastic surgeon operating on a boat in the Amazon River, and two British physicians who spearheaded campaigns against onchocerciasis and leprosy in the Congo. A list of US missionary doctors and their sponsors is given. (DP-E)

6619 **Nasution, S., Virasai, B. ed(s).** *Higher education and basic health needs.* Singapore, Regional Institute of Higher Education and Development, 1979. 207p. Engl.
Regional Seminar on Higher Education and Basic Health Care, Chiang Mai, Thailand, 21-23 Dec 1978.

Papers and discussions from the seminar are presented under these headings: contribution of higher education in meeting basic health needs in rural areas—problems and prospects, the role of tertiary institutions in the delivery of primary health care in urban areas, an evaluation of university curricula in health-related disciplines, and the development of curricula and programmes oriented toward basic health needs. Participants in the seminar represented Indonesia, Malaysia, Singapore, and Thailand. (HC-L)

6620 **Ohaegbulam, S.C.** *Medical education in Nigeria; part 1: curriculum design.* Nigerian Medical Journal (Ikeja, Nigeria), 9(1), Jan 1979, 140-143. Engl.

This paper presents guidelines for preparing the different objectives that should be used as a basis for designing Nigerian medical curricula. These objectives include national health goals, institutional objectives, departmental objectives, and instructional objectives. An illustration is given of an instructional objective based on the diagnosis of toxic goitre. (DP-E)

6621 **Revista Cubana de Medicina Tropical, Havana.** *Cursos de superación en parasitología y medicina tropical ofrecidos por el Instituto de Medicina Tropical "Pedro Kouri." (Postgraduate courses in parasitology and tropical medi-*

cine offered by the Pedro Kouri institute of tropical medicine). Revista Cubana de Medicina Tropical (Havana), 8(3), Sep-Dec 1976, 111-113. Span.

This editorial traces the history of the Pedro Kouri institute of tropical medicine, Havana, Cuba, from prerevolutionary days to the present. The institute now offers a number of courses of interest to medical professors and practitioners alike on these topics: recent advances in parasitology, the state of the art in diagnosis and treatment of parasitism, immunology and parasitism, rickettsias and pararickettsias, toxoplasmosis, and ectoparasitic vectors of rickettsias and pararickettsias. The institute is willing to put the benefit of its experience and knowledge at the disposition of other countries and the World Health Organization. (HC-L)

6622 **Roy, L.E.** *Drame de l'entrainement post-gradué des médecins du Tiers-monde. (Postgraduate training for Third World physicians).* Union Médicale du Canada (Montreal, Que.), 108(3), Mar 1979, 295-300. Fren.

The author discusses the problems facing post graduate medical students from developing countries studying in North America. With fewer and fewer returning to their native countries, universities and hospitals in North America are unable to accomodate them and are tightening admission policies. At the same time, developing countries are suffering from shortages of professional medical personnel. The author suggests improvements in educational exchanges and agreements between teaching hospitals so that students may continue to benefit from the opportunity of studying abroad. (FM)

6623 **Savage, A.** *Mission hospital medicine.* British Medical Journal (London), 2(6182), 14 Jul 1979, 111-113. Engl.

The author, herself a missionary doctor, discusses some of the problems she encountered while working in a mission hospital in the Transkei. The main problems were shortages of supplies, staff, and money. In compensation, she maintains that the general physician acquires a variety of experiences, particularly in the fields of surgery and anaesthesia, not normally available in the home country and unlearns a lot of wasteful habits. A scheme for integrating overseas experience into specialist, and possibly general practice, training is proposed. (DP-E)

6624 **Seal, S.C.** *Current thoughts on medical and public health education and practice in India.* Indian Journal of Public Health (Calcutta, India), 22(4), Oct-Dec 1978, 288-291, 340-344. Engl.

Twenty-second Annual Conference of the Indian Public Health Association, n.p., n.d.

The principle that medical education should be based on the needs of the population has been acknowledged in India for decades; attempts to implement it, however, have actually been in regression over the past 10 years. This paper discusses ways in which the principle could be revised through changes in the medical curriculum, public health internship, manpower planning, specialization, and incentives to rural services. The Indian Medical Association is urged to bring these suggestions to the attention of the proper governmental authorities. (HC-L)

6625 **Spencer, I.W.** *Preparing the health professional for community health.* South African Medical Journal (Cape Town), 55(12), 21 Mar 1979, 444-447. Engl.

The Department of Comprehensive and Community Medicine at the University of Cape Town, South Africa, established in the early 1970s, has attempted to comply with WHO objectives by introducing undergraduate and postgraduate courses featuring epidemiological methods and practical investigation, the family-centred focus, the team approach, and continuous emphasis on integrated (preventive, promotive, curative, and rehabilitative) medicine. This paper discusses the aims and role of the department and presents a cautious assessment of its input on student attitudes to date. (HC-L)

6626 **Stauter, R.L.** *Rural health care round the world.* Journal of the Iowa Medical Society (Des Moines, Iowa), 69(10), Oct 1979, 387-390. Engl.

From October 1977-June 1978, a US medical student participated in rural health care delivery in Scotland, India, Australia, and the Philippines as part of his training programme. He describes his experiences practicing general medicine in isolated Scottish clinics, pediatrics at a rural Indian hospital, emergency medicine with the Australian Royal Flying Doctor Service, and preventive medicine in Philippine villages. The author recommends this type of international experience for other US medical students. (DP-E)

6627 **WHO, Geneva.** *Continuing medical education in the USSR.* WHO Chronicle (Geneva), 24(5), May 1970, 216-218. Engl.

Also published in French, Russian, and Spanish.

Continuing education constitutes the 3rd phase of physician training in the USSR and is an obligatory life-long pursuit. Training courses of three types are available: 2-part courses consisting of a correspondence course followed by a short, intensive course of instruction at Moscow's Central Institute; 1-month extramural or extension courses given by qualified teachers; and full-time courses of 4-5 months duration. The physician receives full salary while in training and all expenses are paid by the state. The further education of teachers and other health workers is also discussed. (DP-E)

IV.1.2 Auxiliary

See also: 6313, 6314, 6317, 6346, 6548, 6560, 6568, 6591, 6594, 6606, 6640, 6666, 6667, 6668, 6669, 6673, 6683, 6698.

6628 **Echeverri, O., Villafañe, P., Salazar, L. de** Centro de Investigaciones Multidisciplinarias en Desarrollo Rural, Calí, Colombia. Servicio Seccional de Salud, Departamento del Cauca, Calí, Colombia. *Sistema rural de servicios de salud: reclutamiento y selección de promotoras rurales de salud. (Rural health services system: recruitment and selection of rural health promoters).* Calí, Colombia, Servicio Seccional de Salud, Departamento del Cauca, Documento SRS D24-1, 1979. 35p. Span.

This booklet presents instructions regarding the application of the various forms, tests, and procedures for recruiting and selecting candidates for training as rural health promoters in Colombia. The forms and tests are included in full. (HC-L)

6629 **Fanning, M.M.** *Medical assistants in the health care delivery system of Papua New Guinea.* Tropical Doctor (London), 11(1), Jan 1981, 39-43. Engl. Refs.

Medical assistants presently deployed in Papua New Guinea include the aid post orderly, the nurse, and the health extension officer. The training and functions of each of these health workers is described. The main problems encountered in such a widespread use of medical assistants are lack of suitable supervision, slowness in arriving at a correct diagnosis, difficulties in upgrading training, and urban migration of all health workers. The relevance of this system for other developing countries is indicated. (DP-E)

6630 **Gachoud, P.** *Auxiliaire volontaire de santé; application à l'Altiplano péruvien des nouveaux concepts concernant les soins de santé primaires des collectivités défavorisées. (Voluntary health auxiliary; application to the Peruvian Altiplano of new concepts of primary health care in disadvantaged communities).* Sozial- und Präventivmedizin (Zurich, Switzerland), 24(2-3), May 1979, 163-166. Fren. 9 refs.

A group of Swiss physicians who have been working for about 8 years in rural health posts in the Peruvian highlands undertook to train volunteer auxiliary health workers chosen by their own communities. Basic training consisted of 2-3 weeks during which the volunteer learned to recognize common illnesses, disinfect and treat wounds, administer medicines and injections, etc. Subsequent training allowed the auxiliaries to enlarge their repertoire and pharmacopoeia and, once their credibility was established, to disseminate health information. A handbook was prepared to serve as a memory aid on the job. The auxiliaries thus trained were found to function most effectively, especially in the domain of tuberculosis case-finding, treatment, and follow-up and child immunization. (HC-L)

6631 **O'Byrne, M., Lyons, J., Coles, T.B.** *Training modules for mid-level health workers.* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(4), Aug 1978, 195-197. Engl. 9 refs.

The Department of Family Practice and Community Health at the University of Hawaii School of Medicine (USA) has developed a series of competency-based training modules. After adaptation to meet local conditions, these modules are used to train middle-level health workers, especially in rural areas of developing countries. Experience to date indicates that this system offers an efficient and effective means for the development of relevant training programmes. A sample table outlines the duties, skills, and knowledge necessary to diagnose and treat common skin problems. (Modified journal abstract)

6632 **Osuhor, P.C., Deleon, A.** *Health manpower development for a rural Nigerian community.* Tropical Doctor (London), 9(4), Oct 1979, 217-220. Engl.

In October 1974, a 2-year maternal child health training programme for 12 locally recruited auxiliaries was initiated in a mainly Moslem area of Malumfashi district, northern Nigeria. The course objectives included taking medical histories and maintaining records, diagnosing and prescribing prepackaged drugs for common diseases, taking anthropometric measurements, etc. Criteria for student selection are given and the training programme, which combined practical experiences with lectures and demonstrations, is described. Some of the cultural adjustments that had to be made because of the Moslem attitude toward women are discussed. (DP-E)

6633 **Radford, A.J.** *Village-based health and medical care resources.* In Hetzel, B.S., ed., Basic Health Care in Developing Countries; an Epidemiological Perspective, Oxford, UK, Oxford University Press, 1978, 146-169. Engl. Refs.
For complete document see entry 6343.

The author discusses the role, utilization, and training of village-based health workers. With little formal training and under varying degrees of supervision, local health workers can participate in primary medical care, health education, and epidemiological recording as well as provide assistance to external services by visiting peripheral communities. They are particularly important in health education and promotion, where their knowledge of local customs and acceptance by the community are invaluable. Maternal child health services, including immunization and family planning, can also be provided by such personnel. Suggestions on the selection, training, and maintaining of indigenous health workers are included. (FM)

6634 Storms, D.M. *Training and use of auxiliary health workers: lessons from developing countries.* Washington, D.C., American Public Health Association, International Health Programs, Monograph Series No. 3, 1979. 134p. Engl. Refs.

This monograph is intended as a practical sourcebook for those engaged in the planning and implementation of auxiliary-delivered basic health services. Its various sections deal with the following: designing a support system; developing a health programme; recruitment, selection, and training of auxiliary health workers; programme implementation, including supervising the auxiliaries; and programme evaluation. The book is based on and provides an extensive bibliography. (HC-L)

6635 Thompson, M. *JAMKHED—a successful treatment.* New Internationalist (Oxford, UK), 80, Oct 1979, 26-27. Engl.

The history and rationale of the Comprehensive Rural Health Care Project, a project for training village health workers (VHWs) initiated at Jamkhed, India, in 1970, are examined. The project's main objective is to help the people help themselves. Women selected by their villages receive 10 days training and support from visiting health teams and now provide family planning, nutrition, and maternal child health care to some 100 000 people in 60 rural villages. The author expresses concern that plans to duplicate this project all over India may fail, now that its founder has left the Ministry of Health due to opposition from the medical profession. (DP-E)

6636 Wakeham, P.F. *You give them something to eat.* Saving Health (London), 18(4), Dec 1979, 6-8. Engl.

As part of its community health programme in rural India, the Emmanuel Hospital Association trains local women chosen by their own communities as village health workers (VHWs). Mainly illiterate, these women spend one day each week receiving formal training and the rest of the time practicing what they have learned under supervision. The VHW's duties include health education, preparing meals for malnourished children, and activating village women to attend antenatal and family planning clinics. (DP-E)

6637 Yu-Hsiang, H. *China: training of barefoot doctors.* In Hetzel, B.S., ed., Basic Health Care in Developing Countries; an Epidemiological Perspective, Oxford, UK, Oxford University Press, 1978, 128-136. Engl.

For complete document see entry 6343.

Following a brief historical description of developments in health care in the People's Republic of China since the Cultural Revolution, the author focuses on the training and utilization of barefoot doctors by examining training courses offered at a commune hospital. The programme gives priority to the teaching of political ideology and is also devoted to a reform of teaching methods and content. The curriculum emphasizes practical work reinforced by classroom discussions and refresher courses. Classes combine basic theory with clinical knowledge. Emphasis is placed on preventive medicine as well as treatment methods and students are encouraged to be versatile by combining Western and traditional medicine as well as medical practice, nursing, and pharmaceutical work. (FM)

IV.2 Nursing Personnel

IV.2.1 Professional

See also: 6313, 6578, 6629, 6700, 6703, 6713.

6638 Afrique Médicale, Dakar. *Ecole des infirmiers et sages-femmes d'Abidjan. (Abidjan school for nurses and midwives).* Afrique Médicale (Dakar), 17(165), 1978, 747-754. Fren.

This article is the 1st in a series on schools for the training of paramedical personnel in Africa. It outlines the legislation governing the general organization, student selection, and course of studies (a 3-year programme including theory, demonstration, and field practice) of the *Ecole Nationale des Infirmières et Sages-Femmes*, Agidjan, Ivory Coast. (HC-L)

6639 American Nurse, Kansas City, Mo. *Study provides profile of nursing care in China.* American Nurse (Kansas City, Mo.), 11(8), 20 Sep 1979, 16. Engl.

A brief review is made of a study on current nursing care in the People's Republic of China. The study includes data on training, nursing practices and nursing roles, the place of nurses in the total health care system, and the influence of sociocultural values. The study emphasizes the apprenticeship system on which Chinese nursing education is based and the importance of continuing education in a work situation. The political aspect of medical education is also underlined, particularly the influence of political developments on training programmes. The integration of traditional medicine and the ways in which nursing services often overlap those of doctors are also studied. (FM)

6640 Fowkes, V., O'Hara-Devereaux, M., Andrus, L.H. *Cooperative education program for nurse practitioners/physician's assistants.* Journal of Medical Education (Chicago, Ill.), 54(10), Oct 1979, 781-787. Engl.

Traditionally, nurse practitioners and physician's assistants have been trained separately in the USA. Despite similarities in curriculum and graduate practice, there has been little or no articulation between their training programmes or professional organizations. In 1977, the Family Nurse Practitioner Program at the School of Medicine, University of California, and the Primary Care Associate Program at Stanford University Medical Center merged clinical curricula. In this article, the authors describe this cooperative educational venture and evaluate its 1st year. (Modified journal abstract)

6641 Hammonds, M. *V.S.A. nurse—Papua New Guinea.* New Zealand Nursing Journal (Levin, New Zealand), 72(6), Jun 1979, 28-30. Engl.

A nurse with Volunteer Service Abroad (VSA) describes her experiences providing maternal child health services to isolated rural villages in Papua New Guinea. During each monthly visit children are weighed and examined, disorders are treated, and vaccinations are given. An antenatal clinic is also held. Adherence to traditional beliefs regarding pregnancy, childbirth, and breast-feeding is strong and a knowledge of them is essential for public health workers. Regular visits to the villages ensure continuous contact with local life-styles. (FM)

6642 Iveson-Iveson, J. *Qatar: a land of opportunities for nurse pioneers.* Nursing Mirror (London), 148(19), 10 May 1979, 20-21. Engl.

The health services of Qatar and the conditions nurses can expect to live and work under are described by a British nurse. Because of the low social status of women, nurses are scarce, restricted, and not socially respected, but the primitive conditions and the variety of illnesses encountered offers an excellent training experience to nurses from developed countries. Two rural clinics are also described. Nurses are advised to negotiate their salaries before leaving the UK. (DP-E)

6643 Jinadu, M.K. *Occupational health and the nurse in developing and industrializing countries.* Royal Society of Health Journal (London), 99(5), Oct 1979, 219-221. Engl.

Occupational health nurses are assuming increasing responsibility for providing health care programmes in most developing country industries. This article discusses the objectives of occupational health, the dimensions of an occupational health programme, staffing levels, the role of the nurse, and services to new, well, and sick or injured employees. The nurse's main functions with relation to occupational health include maintaining clinic facilities for employees and their families, medical records maintenance, first aid, health education, serving on the plant safety committee, liaison with trade union leaders, and notification of accidents. (DP-E)

6644 Meleis, A.I. *International issues in nursing education: the case of Kuwait.* International Nursing Review (Geneva), 26(4), Jul-Aug 1978, 107-110. Engl.

Kuwait's system of primary clinics, combined clinics, and hospitals provides free health care to all citizens. In 1962, the ministry of public health founded a school of nursing and efforts were begun to recruit women to the profession. This article describes the various training programmes for nurses and auxiliary nurses, the efforts being made to recruit students despite the low status of the profession and to recruit faculty (mainly foreigners) despite cultural problems, and the strategies that have been developed in an attempt to solve some of the recruitment problems. (DP-E)

6645 Mojekwu, V.I. *Role of the nurse in Nigeria's basic health services scheme.* Nigerian Nurse (Lagos), 11(1), 1979, 9-17. Engl.

After discussing Nigeria's Basic Health Services Scheme (BHSS) and its coverage, the author examines the role of the nurse within this system, her training, and her present tasks. Possible tasks for the midwife, community midwife, and nurse in the BHSS are outlined and the type of training that will be needed to fulfill these functions is considered. Annexes contain a list of the health cadres for the BHSS, including remuneration, entry education required, length of training, and career prospects, and a specimen of BHSS standing orders for treating fever in a child. (DP-E)

6646 Smith, E.S. *Nursing in rural Papua New Guinea.* Nursing Times (London), 73(6), 10 Feb 1977, 210-211. Engl.

A British nurse describes her experience at a rural health centre serving a population of 8 000 in Iruna, Papua New Guinea. In addition to inpatient and outpatient care and medical patrols, the centre provides a 3-year training course for community health nurses. Their training emphasizes preventive medicine and maternal child health, especially midwifery. The author stresses the need to promote breast-feeding and nutrition education. (DP-E)

6647 WHO, Geneva. *Case for medical assistants.* World Health (Geneva), Jun 1972, 9-15. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

After examining the physician:population distribution in many African countries, the author discusses the need to rethink the role of the physician, who should be considered the leader of the health team rather than the sole dispenser of medical care. Many of the physician's functions could be filled by a properly qualified medical assistant. The education and training of medical assistants are discussed. The author stresses the necessity of establishing a well-defined career structure to provide job satisfaction for the medical assistant without threatening the physician or the quality of medical care. (DP-E)

IV.4 Dental Personnel

IV.4.1 Professional

See also: 6338.

6648 Barnett, S.E., Call, R.L. *Student community dental experience with migrant farmworker families and the rural poor.* American Journal of Public Health (New York), 69(11), Nov

1979, 1107-1113. Engl. 22 refs.

For the past 6 years, 78 dental students have worked with 25 rural dentists to provide dental services to some 31 000 migrant patients in agricultural communities in Colorado (USA). In 1977, each of 19 dental students averaged over US$538.00 weekly in comprehensive dental services, including preventive and peridontal (36%), restorative (46%), surgical (8%), and miscellaneous (5%) services. This dental scheme is an integrated component of a comprehensive government-financed programme combining student and professional services in medicine, nursing, nutrition, and health education. Statistical data are included. (Modified journal abstract)

6649 **Howe, G.L., Renson, C.E.** *Dental education comes to Hong Kong.* British Dental Journal (London), 147(5), 4 Sep 1979, 121-125. Engl.

The planning strategy behind a dental education course initiated by the University of Hong Kong at government request is outlined and discussed. The planning components that had to be considered on a more or less sequential basis included the course's basic philosophy, training courses for dental auxiliaries, the dental teaching hospital (design, equipment, etc.), and the curriculum. It is hoped that the course will eventually produce 60 dentists each year. (DP-E)

6650 **Yépez, P.** *Experiencia ecuatoriana: el trabajo rural como eje para el desarrollo de los servicios odontològicos. (Ecuadorean experience: rural work as an axis for the provision of dental services).* Educación Médica y Salud (Washington, D.C.), 12(4), 1978, 502-511. Span.

In 1972, Ecuador developed an innovative delivery system for bringing basic dental services to its entire population, beginning with the rural inhabitants. The programme was designed to make optimal use of the compulsory year of rural service for dental graduates, appropriately-trained auxiliary personnel, and simplified techniques of mass prevention and treatment. From 1972-1976, the programme reached some 250 000 individuals (in a nation of 6.5 million) and it is considered only a matter of time before universal coverage is achieved. This paper describes and discusses the programme organization. (HC-L)

IV.4.2 Auxiliary

See also: 6338, 6650.

6651 **Sela, M., Anaise, J.Z., Sharav, Y., Adler, I.** *Expanded duties of auxiliaries: a survey of opinions of dental and non-dental groups in Israel.* Israel Journal of Dental Medicine (Tel Aviv), 27(4), Oct 1978, 25-30. Engl. 17 refs.

In order to determine attitudes toward an expanded role for dental assistants, a questionnaire was administered to some dental personnel and members of the public in Jerusalem. The responses to the questionnaire revealed a positive attitude toward greater delegation on the part of both the profession and the public and a general agreement as to which of 30 stated tasks could most readily be delegated. This paper presents and briefly discusses the questionnaire results. (HC-L)

IV.5 Laboratory and X-ray Technicians

See also: 6686.

6652 **Adesola, A.O.** *Radiologist and health care in West Africa; new perspectives.* Nigerian Medical Journal (Ikeja, Nigeria), 8(6), Nov 1978, 487-492. Engl. Refs.
Annual Conference of the Association of Radiologists of West Africa, Lagos, Nigeria, 2 Feb 1978.

The role of the radiologist in the three-tiered system of health care delivery that the author recommends for West Africa is examined and the contributions that radiology can make to gastroenterology (particularly in diagnosis) and radiotherapy are discussed. Due to a shortage of radiographers, it is suggested that nurses could be trained and deployed in this capacity. The need for cooperation among all branches of the medical professional is stressed. (DP-E)

6653 **Mittman, G.A.** *Student preceptorships—a factor in alleviating maldistribution of health professionals?* Radiologic Technology (Baltimore, Md.), 50(4), Jan-Feb 1979, 443-448. Engl. 17 refs.

As part of a US programme that is attempting to correct the maldistribution of medical professionals, 13 students of radiologic technology spent a 4-week preceptorship before their final year of studies in one of several North Carolina community hospitals. The results of a survey administered after this preceptorship indicated that this method could serve to reduce misconceptions about rural areas and thus help to improve manpower distribution. Some of the more common misconceptions are discussed. (DP-E)

6654 **Shardlow, D., Cameron, D.** *Rural hospital laboratory services.* South African Medical Journal (Cape Town), 55(15), 7 Apr 1979, 576. Engl.

There are two main reasons for the poor quality of laboratory services in many African countries: most laboratories are staffed by inappropriately or inadequately trained laboratory assistants and the workload is too heavy and too varied. It is suggested that local physicians establish a limited number of essential tests; laboratory assistants could then receive intensive training in those techniques as well as record-keeping, control procedures, the ordering of supplies, and equipment maintenance. When this policy was implemented in one South African hospital, the cost of monthly laboratory services was reduced by over 80% during a 6-month period. (DP-E)

IV.6 Environmental Health Workers

See also: 6375, 6668.

6655 **Osuhor, P.C., Essien, E.S., Deleon, A.** *Catering personnel and environmental health activities in Malumfashi and Samaru-Zaria, northern Nigeria.* Journal of Tropical Medicine and Hygiene (London), 81(9), Sep 1978, 180-184. Engl. 11 refs.

In 1976, 540 cases of diarrheal disease, including 5 undergraduates with suspected food poisoning, were admitted to the Ahmadu Bello University Teaching Hospital, Nigeria. A 3-month part-time training course in practical food sanitation and hygiene was therefore organized for 79 members of the university catering staff. This paper discusses the preliminary investigations, teaching methods, evaluation, and student response to the course, which was enthusiastic. More courses are planned and it is expected that their impact will be felt in the trainees' homes and committees as well as on the job. (HC-L)

IV.8 Health Educators

6656 **Brieger, W.R.** *In-service training methods in health education.* Journal of Tropical Medicine and Hygiene (London), 82(7), Jul 1979, 145-149. Engl. 10 refs.

This paper discusses some of the special considerations for in-service training programmes in health education with emphasis on utilizing training methods that are consistent with health education principles. Topics covered include the definition of educational functions, approaches in training, training principles and methods selection, and the development and utilization of methods. Appendices contain samples of patient education role-playing and a community education development case study and a table outlines the general educational functions of various types of health workers. (DP-E)

6657 **Handler, S.L.** *Experiment in training high school students as health education aides in the US.* International Journal of Health Education (Geneva), 21(2), Apr-Jun 1978, 124-129. Engl.

As health education aides in the USA, high school students have filled a gap in hospitals and health agencies by supplying the imaginative manpower needed to collect, produce, and present educational materials and to provide these services as requested by various members of the professional staff. The student "teachers" have mastered a great deal of health knowledge in order to carry out their teaching functions and they have also mastered skills that have proved useful to their further training and employment in medicine and allied health careers. (Modified journal abstract)

6658 **Seitz, R.** *Scholars who teach.* World Health (Geneva), Aug-Sep 1979, 22-27. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

The author describes the typical daily activities of *barangay* nutrition and health scholars in rural areas of the Philippines. These auxiliary health workers are recruited in their own neighbourhoods to identify and assist severely malnourished children. Supplementary feeding programmes are common, but more permanent results are obtained by providing nutrition education to mothers. One of the goals of the Philippines' Nutrition Programme is to reduce the incidence of 3rd degree malnutrition by 25%. In areas where *barangay* scholars have been working, there has been a 38.5% decrease in the number of severely malnourished children. (FM)

IV.9 Teaching Aids

IV.9.1 Health Care, Nutrition, and Disease Control

See also: 6732.

6659 **ACTION, Peace Corps, Washington, D.C.** *Health and sanitation lessons (Africa).* Washington, D.C., ACTION, Peace Corps, Information Collection and Exchange Reprint Series No. 27, n.d. 94p. Engl.
Originally published in French.

This collection of health, nutrition, and sanitation lessons was designed for use in the Gambia by health educators in home visits, prenatal and postnatal consultations, clinics, and primary schools. Each lesson is divided into six sections: goal, objectives, visual aids, presentation, questions, and summary, with the purpose of eliciting active participation by the target group or person. Topics covered include antenatal care, childbirth, home and maternal child health clinic visits, monitoring child growth, cleaning the compound, personal hygiene, feeding and weaning, proper sanitation and consequences of poor sanitation, common illnesses, and immunizations. Appendices comprise sample recipes, a nutrition lexicon, and notes on complementary proteins. (EB)

6660 **African Medical and Research Foundation, Nairobi.** *Hand-infections and soft tissue injuries (3).* AFYA (Nairobi), 13, Sep-Oct 1979, 154-157. Engl.
See also entry 6661.

Guidelines for treating injured or burned hands are given. The most common hand injuries are punctures, cuts, and lacerations. First aid procedures emphasize tetanus immunization, the imperative need to stop any bleeding, examination for movement and sensation, and cleansing; surgical closure must be done in a hospital rather than a health centre and should never be performed on a wound more than 6 hours old. Immersion in cold water, followed by cleaning and dressing, is the basic treatment for a burned hand. (DP-E)

6661 **African Medical and Research Foundation, Nairobi.** *Hand-infections and soft tissue injuries (2).* AFYA (Nairobi), 13, Jul-Aug 1979, 118-120, 122-125. Engl.
See also entry 6660.

Instructions are presented for the diagnosis, management, and aftercare of the most common types of hand infections: superficial infections (cellulitis, paronychia, apical abcess), pulp space infections, tendon sheath infections, and palmar space infections. Many of these conditions require surgical treatment and drainage, which are illustrated using detailed drawings. (DP-E)

6662 **Ahmad, Z.S., Ahmad, S. ed(s).** *Primer of health education; work book one.* Kisumu, Kenya, HOPE, 1979. 1v.(unpaged). Engl.

This booklet intended for use in Kenya's elementary schools from the 1st grade on illustrates by means of simple drawings and English captions the origins and effects of ill health. Blank pages are provided throughout for the child's own drawings on the subject and translations of the captions into the vernacular. The booklet was devised on the premise that the introduction of health science education as a regular subject in primary school will prove a powerful means of disseminating health information and reducing disease. (HC-L)

6663 **Basset, A.** *Quand penser à une lèpre? (When to think of leprosy?).* Revue du Praticien (Paris), 28(47), 21 Oct 1978, 3625-3640. Fren.

Leprosy should be suspected in subjects who come from or have lived in areas where the disease is endemic. The disease can present very diverse symptoms: disorders of skin pigmentation, skin nodules and infiltrates, nervous system involvement, trophic disorders, and systemic disease. The author describes each of these conditions with the aid of appropriate photographs. Diagnosis rests on the discovery of Hansen's bacilli in lepromatous leprosy and on the demonstration of nervous disorders in tuberculoid and borderline leprosy. (FM)

6664 **Bewes, P.C.** *How to prevent bedsores, contractures and urinary infection in cases of traumatic paraplegia.* AFYA (Nairobi), 13, Jul-Aug 1979, 98-101. Engl.

Designed for use in low-technology African hospitals, these four procedures, properly applied, will prevent bedsores, muscle contractures, and urinary retention in bedridden paraplegic patients. Hospital staff are instructed to: (1) turn the patient every 2 hours, (2) put all joints through a full range of movements regularly, (3) catheterize every 6 hours rather than leaving an indwelling catheter, and (4) teach the patient to lead an independent existence. In a Tanzanian hospital where these guidelines were applied, the average patient stay was 3-4 months. (DP-E)

6665 **Cameron, M., Hofvander, Y.** *Manual sobre alimentación de lactantes y niños pequeños. 2 edición. (Manual on feeding the infant and young child. 2 edition).* New York, Grupo Asesor sobre Proteinas y Calorías, Naciones Unidas, 1977. 180p. Span. 55 refs.
For 1st edition in English see entry 1269 (volume 2).

This manual is intended for all health workers involved in nutrition education in developing countries. With the aid of numerous illustrations, photos, tables, etc., it treats the following topics: fetal growth and development; physiology of, nutritional value of, and obstacles to breast-feeding; principal causes of death in children aged less than 5 years in developing countries; nutrients and their utilization during the 1st 5 years of life; the nutritive contribution of various foods; food preparation and its effect on nutritive value; teaching nutrition; food measurement; care of foods and utensils; infant formulas; commercial and home-made weaning foods (recipes included); and an infant feeding programme from birth to 18 months of age. Advice on preparing a local edition of this manual is included. (HC-L)

6666 **Durana, I., Gautreau, H., Simmonds, S., Desclaux, J., Elliott, V.** *Teaching strategies for primary health care; a syllabus.* New York, Rockefeller Foundation, July 1980. 176p. Engl.

This handbook is intended to help instructors, administrators, and planners in the Third World to develop a training programme for primary health care workers (middle-level auxiliaries) suited to their particular circumstances. The 1st part discusses the social skills and qualities required by the primary care worker and how they may be acquired and translated into action. Parts 2 and 3 contain instructional content and appropriate learning strategies relevant to the health of the community and of the individual. A 32-item annotated bibliography of relevant materials is appended. (HC-L)

6667 **Ecuador, Ministerio de Salud Pública. Banco Central del Ecuador, Quito.** *Manual de uso institucional. (Manual for institutional users).* Quito, Banco Central del Ecuador, Programa de Atención Primaria de Salud (FODERUMA), Programa de Extensión de Cobertura Mediante la Estrategia de Atención Primaria de Salud con Participación Comunitaria, Volumen 1, 1980. 97p. Span.
See also entires 6668 and 6669.

In response to the recommendations of the conference at Alma-Ata, Ecuador's *Ministerio de Salud Pública* has drawn up a national health plan for 1980-1984 that is designed to deliver primary health care to the entire rural population. Part of this volume gives the background and the model of this national health plan. A 2nd section contains a manual for recruiting and selecting rural health promoters with sample forms to be used for interviews, examinations, certification, etc. A supervisor's manual with sample forms comprises the final section and sets forth the expected activities of both rural health promoter and supervisor in the areas of family and maternal child health, environmental sanitation, data collection, and medical records. (RMB)

6668 Ecuador, Ministerio de Salud Pública. Banco Central del Ecuador, Quito. *Manual del promotor. (Rural health promoter's manual).* Quito, Banco Central del Ecuador, Programa de Atención Primaria de Salud (FODERUMA), Programa de Extensión de Cobertura Mediante la Estrategia de Atención Primaria de Salud con Participación Comunitaria, Volumen 2, 1980. 115p. Span.
See also entries 6667 and 6669.

This volume of the rural health promoter's manual concerns environmental health and sanitation. Separate sections cover planning, rural water supplies (rainwater, surface water, and underground water), construction of sanitary facilities, living conditions, garbage disposal, and the control of flies, rodents, mosquitoes, and fleas. Each section explains the particular problem to be considered, outlines in step-by-step fashion what the promoter can do and how to do it, and suggests appropriate lessons in health education for the community. Many drawings are used to illustrate concepts and procedures. (RMB)

6669 Ecuador, Ministerio de Salud Pública. Banco Central del Ecuador, Quito. *Manual del promotor. (Rural health promoter's manual).* Quito, Banco Central del Ecuador, Programa de Atención Primaria de Salud (FODERUMA), Programa de Extensión de Cobertura Mediante la Estrategia de Atención Primaria de Salud con Participación Comunitaria, Volumen 3, 1980. 241p. Span.
See also entries 6667 and 6668.

This volume contains six manuals for rural health promoters. The 1st covers community organization while the 2nd, on maternal child health, deals with pregnancy, antenatal and postpartum care, parturition, breast-feeding, and child health. The nutrition manual examines food values, causes of malnutrition, and ways of improving food handling and production. Diagnosis and treatment of common diseases are the subject of the following manual, while the first aid manual concerns acute conditions and emergency treatment of fractures, burns, snake bites, shock, etc. The last manual contains instruction for filling out forms and activities reports and maintaining medical records. (RMB)

6670 England, R. *How to make basic hospital equipment.* London, Intermediate Technology Publications, 1979. 86p. Engl.

This handbook gives complete instructions for the manufacture of medical equipment in developing countries using locally available materials. The equipment is designed to accommodate local conditions and needs; is easier to repair and improve; is less expensive than imported, more sophisticated products; creates local employment where there are job shortages; creates local skills and experiences, which can be utilized in other fields; and creates self-reliance and confidence. Design instructions are given for a folding hospital bed, ward screen, wheelchair, bicycle ambulance, suction pump, infant weighing scales, baby incubator, chair with wheels, walking frame, etc. (AF)

6671 Essex-Cater, A.J. *Manual of public health and community medicine. 3 edition.* Bristol, UK, John Wright and Sons, Synopsis Series, 1979. 731p. Engl. 15 refs.

Although not intended as a substitute for standardized textbooks, this manual presents a synopsis of issues in public health and community medicine for students and health workers in the UK. Separate chapters cover health services, the history of public health and social medicine, medical statistics, epidemiology, mortality and morbidity, communicable diseases, social security and the social services, occupational disorders, food, environmental health, maternal child health, school health, and mental health. Many chapters contain statistical data and there is an index. (DP-E)

6672 Gardiner, P.A. *ABC of ophthalmology; articles from the British Medical Journal.* London, British Medical Association, 1979. 43p. Engl.

This compendium of articles originally published in the British Medical Journal presents simple instructions for eye care and the treatment of various ophthalmological conditions and eye injuries. It covers accidents and first aid, management of vision defects in early childhood, cataracts, visual difficulty in old age, blindness and partial sight, ophthalmic services in the UK's national health service, common or difficult diagnoses, evaluating common signs and symptoms, and general medicine and visual side effects. Many photographs and drawings are included. (DP-E)

6673 King, M., King, F., Martodipoero, S. *Primary health care: book two; a guide for the community leader, manager, and teacher.* Oxford, UK, Oxford University Press, Oxford Medical Publications, 1979. 194p. Engl. 14 refs.
See also entry 5437 (volume 8).

The major theme of this handbook for community leaders, managers, and teachers is improving the quality of primary child care by means of improved educational techniques for health workers. Separate chapters cover the measurement of quality, instruments for learning and evaluation, learning and relearning primary child care, implementing the training microplan, and the worker's manual. Three booklets containing pretests, post-tests, and multiple choice questions that health workers can use to teach and evaluate themselves are included. There is a list of equipment and supplies. (RMB)

6674 **Knox, E.G., Acheson, R.M., Anderson, D.O., Bice, T.W., White, K.L. ed(s).** International Epidemiological Assocition, Geneva. WHO, Geneva. *Epidemiology in health care planning; a guide to the uses of a scientific method.* Oxford, UK, Oxford University Press, Oxford Medical Publications, 1979 198p. Engl. Refs.

This handbook examines ways in which the scientific method and logic can be introduced into health services planning in order to provide a rational basis for setting priorities and allocating resources; it also attempts to interpret epidemiological principles and methods for health planners. Part 1 discusses and analyzes the planning process within which a variety of workers, including epidemiologists, have to operate. After a discussion of health care information in part 2, part 3 displays the scientific and technological basis of epidemiology and describes the kinds of problems with which it can cope. Part 4 covers training methods and the working relationships between epidemiologists and other health planners. There is an index. (DP-E)

6675 **Latham, M.C.** *Human nutrition in tropical Africa: a textbook for health workers with special reference to community health problems in East Africa.* Rome, FAO, 1979. 286p. Engl. Refs.

This well-illustrated book on nutrition in East Africa covers nutrition, infection and diseases, malnutrition, social and cultural factors in nutrition, nutrition during pregnancy and breast-feeding, and child nutrition. The elements of basic nutrition—fats, proteins, minerals, and vitamins—are described as are nutritional disorders such as beriberi, pellagra, and scurvy. A list of foods and their values is followed by a section on food and nutrition policy and programmes. Instructions are given concerning diets, recipes for infants and young children, and home preservation of food. Five appendices are included. (AF)

6676 **López-Antuñano, F.J.** *Guide to the chemotherapy of human malaria.* Washington, D.C., Pan American Health Organization, Scientific Publication No. 373, 1979. 21p. Engl.
Also published in Spanish and Portuguese.

These guidelines on the use of drugs to treat malaria cover the life cycles of human plasmodia, the mechanism of drug action, toxicity in mammals and human beings, methods of evaluating plasmodium resistance to drugs, practical application of treatment schedules, and case follow-up. Dosages for the various types of drugs are presented in tables. An annex contains a scale used by the Institute of Nutrition of Central America and Panama to calculate drug dosages by weight, age, and sex. (DP-E)

6677 **McMahon, R., Baron, E., Piot, M.** *On being in charge; a guide for middle-level management in primary health care.* Geneva, WHO, 1980. 366p. Engl.

Part 1 of this WHO guide for primary health care managers gives the meaning, definitions, and principles of management and describes the functions it serves. Part 2 explains how to lead a health team, organize its activities, and control and assess the work, while part 3 discusses managing resources such as equipment, drugs, money, time, space, and paperwork. Part 4 reviews managing primary health care services and the planning, implementing, and evaluating of health activities. Exercises are given at the end of each chapter and statistical data are included. (AF)

6678 **Meltzer, A.S.** *Sexually transmitted diseases; guidelines for physicians and health workers.* St. Albans, Vt., Eden Medical Research, 1981. 85p. Engl. Refs.

These guidelines, intended for use by physicians, medical students, nurses, and other health professionals, highlight some of the practical aspects of the problem of sexually transmitted diseases. The following infections are examined, giving a brief outline of causes, diagnosis, and treatments: urethral discharge, vaginal discharge, gonorrhea, non-gonococcal urethritis, syphilis, genital ulcers and candidiasis, herpes genitalis, "tropical" sexually transmitted infection, pelvic inflammatory disease, and sexually transmitted infection in the pregnant patient. The final chapter describes the important role of the nurse in screening programmes. The appendix includes the format of a medical case sheet, notes on commonly used drugs, and the management of acute hypersensitivity reactions to penicillin. (EB)

6679 **Morley, D., Woodland, M.** See how they grow—*monitoring child growth for appropriate health care in developing countries.* New York, Oxford University Press, 1979. 265p. Engl. 153 refs.

This handbook, written primarily for use by health workers in developing countries, is aimed at promoting the growth and development of underprivileged children from all areas of the world. The growth chart and its use in the diagnosis and treatment of malnutrition and specific diseases (measles, whooping cough, diarrhea, tuberculosis, anaemia, etc.) are thoroughly discussed and specific forms of treatment recommended. The at-risk child is also considered, while other sections cover breast-feeding, community involvement in child health, and the selection and training of voluntary health workers. Illustrations and sample charts are included. (AF)

6680 **Pradervand, P.** *Education pour le développement en Afrique:* Famille et développement *ou la naissance d'un journalisme éducatif. (Education for development in Africa;* Family and development *or the birth of educational jour-*

nalism). Sozial- und Präventivmedizin (Zurich, Switzerland), 24(2-3), May 1979, 180-184. Fren.

See also entry 2395 (volume 4).

In 4 years, the quarterly publication *Famille et Développement*, published in Dakar, Senegal, has attained a circulation of 30 000-35 000 and can be considered one of the most influential publications in francophone Africa. Produced by Africans for Africans, its policy is to foster self-reliance and to point out opportunities that exist, even at the village- or urban slum-level, for improving the quality of one's life. In health, this means pursuing the democratization of health knowledge—a mandate made easier by the fact that most factors affecting health in rural Africa lie outside the domain of modern medicine. This paper discusses examples of articles contained in the magazine and their particular relevance to the African situation. The magazine came under the auspices of the *Association Africaine pour l'Education du Développement* in 1979 and this organization hopes to extend its impact through the preparation of appropriate radio broadcasts. (HC-L)

6681 **Swift, C.R., Asuni, T.** *Mental health and disease in Africa.* Edinburgh, Longman Group, 1975. 257p. Engl. Refs.

Intended as a handbook and a reference for African medical students and general practitioners, this book summarizes the various forms, diagnoses, and treatment of mental illness using examples and experiences from different African societies. The authors also examine the legal aspects of psychiatry, defend traditional healers and practices, and propose schemes for organizing mental health services, especially preventive programmes, and training auxiliaries. Appendices contain a sample form for psychiatric evaluation, a list of drugs and their functions, and course outlines for medical and nursing auxiliaries. An index and a bibliography of further readings are included. (RMB)

6682 **Taylor, B.** *Rural health indicator surveys.* Washington, D.C., American Public Health Association, International Health Programs, 1975. 87p. Engl.

These guidelines for periodic, cross-sectional health surveys are intended for use within a low-cost, auxiliary-staffed, rural health care system in Bolivia. The need for health indicator surveys is explained and such factors as the evaluation team, vital statistics, and population sampling are discussed. The basic elements of the survey comprise the household census, health questionnaires, anthropometry, physical signs, and dental and laboratory examinations. Separate sections cover organization and data expression. Statistical data are included. (DP-E)

6683 **University of the West Indies, Department of Social and Preventive Medicine, Mona, Jamaica.** *Supplement to manual for community health workers.* Mona, Jamaica, University of the West Indies, Department of Social and Preventive Medicine, Supplement Series No. 1 to No. 6, 1976. 1v.(various pagings). Engl.

See also entry 569 (volume 1).

Published in 1973 by the University of the West Indies (Jamaica), this volume is written as a supplement to the Manual for Community Health Workers. The authors outline the population growth and characteristics of Jamaica, St. Lucia, St. Vincent, Barbados, and Montserrat, and the age and sex structure, health services, social welfare, education, and mortality of the populations. Copious statistical data are included. (AF)

6684 **USA, Department of Health, Education, and Welfare, Public Health Service.** *Approach to the study of health sector financing in developing countries: a manual.* Rockville, Md., Department of Health, Education, and Welfare, Public Health Service, Office of International Health, May 1978. lv.(various pagings). Engl. Refs.

This manual presents an action-tested procedure for appraisal of health sector financing that can be used, with local adaptations, to examine health sector financial resources in developing countries. Separate sections cover the determination of components of the health sector, the acquisition of data on health sector financing, the evaluation of the data collected, and the presentation of evaluation results and recommendations. Appendices contain model tables, a list of sources of health services financing, and a bibliography. (DP-E)

6685 **WHO, Geneva.** *Towards a better future; maternal and child health.* Geneva, WHO, 1980. 42p. Engl. 18 refs.

The lst 6 chapters of this WHO handbook are devoted to the principles of maternal and child health care in developing countries, the health status of mothers and children and factors affecting their health, developments in maternal and child health technologies and knowledge, and recent trends in maternal and child health care. The final chapters explain what can be done to alleviate health problems in this area through the application of technologies already well known and describe WHO's role in the promotion of maternal and child health care. Statistical data are included. (AF)

6686 **WHO, Geneva.** *Manual of basic techniques for a health laboratory.* Geneva, WHO, 1980. 487p. Engl.

Written by WHO, this manual is compiled for use in the training of laboratory technicians in developing countries and for routine work in clinical or health laboratories. Particular attention is paid to low cost and the use of available resources in small laboratories. Part 1 outlines the basic general procedures in the laboratory—adjustment and maintenance of the microscope, cleaning glassware, sterilization, centrifuges, etc., whereas part 2 discusses parasitology, bacteriology, serology, and mycology, and part 3 outlines the examination of urine and cerebrospinal fluid, haematology, blood chemistry, and blood transfusion. Explanatory line drawings accompany most entries. There is an index. (AF)

6687 **WHO, Geneva.** *International classification of disease, ninth revision; basic tabulation list with alphabetical index.* Geneva, WHO, 1978. 331p. Engl.

Many developing countries, because of limited resources, have been unable to follow the WHO recommendation that mortality and morbidity statistics be coded according to the detailed list of 3-digit categories of the International Classification of Diseases (ICD). Consequently, they used the less complex lists, usually list A, despite the lack of an alphabetical index. This 9th revision of the ICD replaces list A with a basic tabulation of 307 cause groups and includes an extensive alphabetical index of diagnostic terms with their code numbers in an effort to help developing countries code and tabulate their mortality and morbidity data according to these criteria. (DP-E)

6688 **WHO, Geneva.** *What is UNIPAC?* WHO Chronicle (Geneva), 32(10), Oct 1978, 391. Engl.

Also published in French, Russian, and Spanish.

The main finction of UNIPAC, the Packing and Assembly Centre of UNICEF, is to assemble and ship articles and equipment needed for UNICEF-assisted programmes, including laboratory equipment, midwifery kits, cooking utensils, agricultural implements, pharmaceuticals, playground equipment, and teaching materials. This article contains a list of seven publications that form a part of the Remaha (Reference materials for health auxiliaries and their teachers, WHO Offset Publication No. 29) collection and are currently available in English but may be produced in French, Portuguese, and Spanish if the demand warrants it. Enquiries should be addressed to the UNICEF representative in the country concerned. (HC-L)

6689 **WHO, Manila.** *Health aspects of food and nutrition; a manual for developing countries in the Western Pacific Region of the World Health Organization. 3 edition.* Manila, WHO, 1979. 380p. Engl.

In this volume, WHO experts discuss the steps necessary to overcome malnutrition in the Western Pacific region. Foods and nutrients consumed, and their recommended intakes, are examined in chapter 1, while chapter 2 deals with nutritional anaemias, endemic goitre, vitamin deficiencies, etc. Nutrition of the mother, infant, preschool and school age child, and adult are the subjects of chapter 3 and chapter 4 deals with nutritional surveillance carried out in the area. Chapter 5 explains nutritional policies, programmes, rehabilitation, and education. Statistical data are included. (AF)

IV.9.2 Family Planning and Midwifery

See also: 6602, 6688.

6690 **Armstrong, H.** *Helping mothers to breastfeed (1).* AFYA (Nairobi), 13, Sep-Oct 1979, 140, 142-147. Engl.

See also entry 6590.

The most important way African maternal child health personnel can promote breast-feeding is by reinforcing local customs and attitudes, all of which encourage breast-feeding for prolonged periods of time. Health centre staff can also set a good example by breast-feeding their own children and persuading the literate population (often a model to the less educated) to do the same. The two basic principles that should be emphasized in antenatal education are that more suckling makes more milk and that the mother's nutrition and well-being are essential. Instructions for handling some common breast-feeding problems are given. A 20-point checklist for evaluating a breast-feeding programme is included. (DP-E)

6691 **Fundación para Estudios de la Población, Mexico City.** *¿Como soy..? (What am I like..?).* Mexico City, Fundación para Estudios de la Población, Departamento de Información y Educación, n.d. 1v.(unpaged). Span.

In a style that is simple, reassuring, and humorous, this cartoon-illustrated booklet answers many questions regarding the physiological changes that mark the onset of puberty and the attainment of sexual maturity in both boys and girls. (HC-L)

6692 **Gray, R.H.** WHO, Geneva. *Manual for the provision of intrauterine devices (IUDs).* Geneva, WHO, 1980. 51p. Engl.

This manual was designed to supplement practical training for health workers involved in the insertion of intrauterine devices (IUDs) It provides practical information on insertion and removal techniques, client counselling, history-taking, and physical examinations. Anatomy of the pelvic organs is covered, followed by step-by-step guidelines to IUD insertion requirements. Other chapters cover factors requiring referral to a physician, diagnosis and treatment of complications and side effects, and the follow-up of continuing IUD users. A check list for history-taking and pelvic examination is also included. It is recommended that trainees perform 50-60 supervised pelvic examinations and 10-15 supervised IUD insertions. (FM)

6693 **Leonard, A.** *Sin palabras (without words).* New York, CYCLE Communications, 1979. 12p. Engl.

The steps taken by PIATA (in English, the Programme for the Introduction and Adaptation of Contraceptive Technology of Mexico) to develop and evaluate a pamphlet for illiterate women that explains the use of oral contraceptives are described. Lessons learned for the PIATA experience that could be helpful for others working with illiterates include: having a project director who has experience and rapport with the target population; involving the target population in the project and always taking their suggestions over those of the literate, sophisticated administrators; limiting the content of the most important messages; keeping the illustrations as simple as possible; allowing more time for the design and testing of non-verbal material; remembering that not all technical information can be taught this way; and paying as much attention to sequence as to content. (DP-E)

6694 **WHO, Geneva.** *Induced abortion: guidelines for the provision of care and services.* Geneva, WHO, WHO Offset Publication No. 49, 1979. 69p. Engl. Refs.

These guidelines are intended to assist health administrators and clinicians who, following changes in legislation or policies regarding induced abortion, are faced with an increasing demand for such care within limited resources. This booklet is designed to give factual up-to-date information on the techniques available for 1st- and 2nd-trimester abortions, their health implications, the prevention of complications, etc. Relatively detailed descriptions of the procedures have been included to give the necessary background for recommendations on requirements and service implications. These descriptions are not intended specifically for teaching purposes; they might, however, be useful for clinical work. (DP-E)

6695 **WHO, New Delhi.** *Guidelines on the teaching and practice of neonatology.* New Delhi, WHO, South-East Asia Series No. 6, 1977. Engl.

This WHO manual is intended for developing country physicians, midwives, and other health workers involved in the teaching and practice of pediatrics. Separate chapters cover the introduction of neonatology into teaching programmes, related definitions and statistics, the practice of neonatology, the fetus, the newborn infant, asphyxia in the newborn, and perinatal mortality. Annexes contain information on drugs in pregnancy, antenatal screening, amniocentesis, a sample observation chart, and assessment of prematurity. A syllabus for courses in neonatology is included. (DP-E)

V Formal Evaluative Studies

V.1 Health Workers

See also: 6640, 6657.

6696 **Bamisaiye, A.** *Using primary school children to assess nutritional status in the community.* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(5), Oct 1978, 223-225. Engl.

A mid-arm circumference strip that provides a quick and reliable assessment of nutritional status is described. This assessment technique is simple to use and does not depend on knowledge of the child's exact age; consequently, village women and schoolchildren can take accurate measurements. The purpose of this study was to assess the reliability of the results when 150 primary schoolchildren from Lagos, Nigeria, aged 10-16 years, used the circumference strip on younger siblings. It also evaluates the extent to which these children could advise their mothers on nutritional practices. While results showed the children achieved acceptable standards of reliability using the arm circumference strip, the "explain and advise" section of the programme was much less effectively carried out, mainly because the culturally-derived problems of children presenting information to adults were underestimated. Statistical data are included. (DP-E)

6697 **Bhakoo, O.N., Garg, S.K., Aggarwal, K.C., Gupta, A.N.** *Socio epidemiological study of neonatal tetanus.* Indian Pediatrics (Calcutta, India), 13(7), Jul 1976, 545-552. Engl. 15 refs.

A study of epidemiological factors relating to neonatal tetanus in rural Punjab (India) showed no statistical differences between the 44 study and matched control families with regard to general living conditions, quality of asepsis at delivery, aftercare of the cord, or the knowledge of the midwife and the family about tetanus and its prevention. Cattle dung for treating the cord was brought to almost every house and in 35% of cases butter ghee was used. The one redeeming feature of the study was that 60.6% of the untrained midwives were willing to receive short-term training. Statistical data are included. (Modified journal abstract)

6698 **Crouch, P.R.** *Tubal ligations: a review of three years' work by a medical auxiliary.* Tropical Doctor (London), 9(4), Oct 1979, 189-191. Engl.

In 1975, a 36-year-old male operating theatre orderly with 1 year of formal education and 15 years of hospital experience was trained by two physicians to perform tubal ligations in Kainantu, Papua New Guinea, provided that a doctor was present in the hospital, the operation was performed under local anaesthetic, a doctor was consulted if complications arose, and a consent form had been signed by both husband and wife. The operation technique is described. Evaluation of the orderly, who required assistance during 8 of the 214 tubal ligations he performed, revealed that he and other auxiliaries can be trained to carry out the operation competently. Statistical data are included. (DP-E)

6699 **Cutting, W.A., Harpin, V.A., Lock, B.A., Sedgwick, J.R.** *Can village mothers prepare oral rehydration solution?* Tropical Doctor (London), 9(4), Oct 1979, 195-199. Engl.

This study was conducted to assess the accuracy of village mothers in India and Trinidad in preparing in the home an oral rehydration solution using either common kitchen ingredients or a prepackaged powder (in India only). The results revealed that, while over 83% of rural women were able to reconstitute the prepackaged solution accurately using domestic vessels, the finger-pinch method for measuring salt for the home-made solution had an unacceptably wide variation and is not recommended unless adequately taught in a particular cultural context. Statistical data are included. (DP-E)

6700 **Deiman, P.A.** *Evaluation of nursing practice and nursing education.* Bulletin of the Pan American Health Organization (Washington, D.C.), 13(3), 1979, 235-243. Engl. 10 refs.

This paper examines the purpose and value of the three types of evaluation—structure, process, and outcome—and describes the principal steps in the evaluation process. To facilitate the implementation of on-going evaluation, the nursing profession in Chile is urged to define its programme of service objectives in terms of health outcome, to note changes in the nurse's role, to define relevant national criteria for judging the quality of nursing care, and to take the lead in establishing quality control programmes for monitoring itself. (HC-L)

6701 **León, C.A.** *"Barefoot" researchers: the potential role of rural students as mental health promoters performing prevalence surveys.* Bulletin of the Pan American Health Organization (Washington, D.C.), 15(4), 1981, 361-369. Engl. 13 refs.
Also published in Spanisn in *Boletín de la Oficina Sanitaria Panamericana*, 90(5), 1981.

This article describes a 1978 experiment in which a working group of 43 high school students helped plan and execute a survey of mental disorders in a rural Colombian community. A total of 128 persons aged 15 years and over, living in 35 families, were questioned regarding 7 major areas of psychopathology. It was found that 31 of 55 subjects singled out had some kind of mental disorder. The effectiveness and success of this training exercise demonstrates a potential for such people to do research tasks traditionally performed by more experienced and educated personnel. (EB)

6702 **Ramos, R., Apelo, R.A.** *Program of IUD insertions by paraprofessionals and physicians in the Philippines.* International Journal of Gynaecology and Obstetrics (Baltimore, Md.), 16(4), 1979, 321-323. Engl.

A programme of intrauterine device (IUD) insertions by non-physicians (nurses and midwives) and physicians was undertaken at the José Fabella Memorial Hospital, Manila, the Philippines. Both Lippes C and D were inserted in the postpartum and interval periods. Results show that nurses and midwives can safely and effectively perform IUD insertions, although there are indications of a need to periodically monitor, and perhaps retrain, all personnel in the techniques of IUD insertion. Statistical data are included. (Modified journal abstract)

6703 **Rosenblatt, R.A., Huard, B.** *Nurse practitioner as a physician substitute in a remote rural community: a case study.* Public Health Reports (Rockville, Md.), 94(6), Nov-Dec 1979, 571-575. Engl. 9 refs.

Reasons why a nurse practitioner failed to establish a viable practice in Condon, Oregon (USA), a rural town without a physician, are analyzed. The main factor was the opposition of the members of Oregon's boards of medicine and pharmacy, who were able to impose a 5-month prohibition on the signing of prescriptions by nurse practitioners. The nurse practitioner's ineligibility for Medicare reimbursement also diminished the potential patient population. Statistical data are included. (DP-E)

6704 **Sánchez-Medal, L.** *Pecados capitales de los médicos. (Major sins of the physician).* Gaceta Médica de México (Mexico City), 114(7), Jul 1978, 337-339. Span.

The original list of the seven deadly sins of the physician was formulated some 30 years ago and contains the following: obscurity, cruelty, bad manners, overspecialization, love of the rare, stupidity, and laziness. To these the author adds the desire for money, disorientation, discrimination, and linguistic barbarism, expanding on each with examples as required. (HC-L)

V.2 Organization and Administration

See also: 6306, 6327, 6340, 6367, 6577, 6610, 6650, 6682, 6761, 6764, 6832.

6705 **Alderman, M.H., Reader, G.G.** *Public health in China: 1978.* American Journal of Medicine (New York), 67(1), Jul 1979, 3-5. Engl.

The authors summarize the findings of two medical groups from the USA after a tour of medical facilities in the People's Republic of China. After describing general living conditions, they examine child care services and the availability and use of traditional and modern drugs. The practice of acupuncture for anaesthesia during major surgery is also explained. Visits to a cardiovascular centre and a commune are described. In conclusion, they note the lack of a central reporting structure to gather statistics for broad planning and underline certain incongruities in a health care system that, although exemplary in many ways, ignores a number of current problems. (FM)

6706 **Andrianasolo, R., Simmons, W.K., Latham, M.C., Gurney, J.M., D'Souza, A.** *Evaluation of a simplified method for screening hemoglobins in the field.* American Journal of Clinical Nutrition (Bethesda, Md.), 32(4), Apr 1979, 728-730. Engl.

The copper sulphate method has recently been introduced into Jamaican prenatal clinics to test the haemoglobin levels of pregnant women. Blood samples taken from the finger are screened on the spot by clinic staff, who then prescribe an iron supplement if necessary; previously, 6-8 weeks were required for laboratory analysis of these samples. A test involving 158 women revealed that 82.6% were diagnosed correctly using this method and the authors recommend it for use in the field. (DP-E)

6707 **Blumhagen, J.** *Health care Upper Volta.* Washington, D.C., American Public Health Association, 1977. 1v.(various pagings). Engl.

This analysis of the health situation in Upper Volta covers such aspects as rural health care delivery, the health services and social welfare, specific health programmes (nutrition, disease control, etc.), available health facilities, and epidemiology. Recommendations are made concerning the planning of appropriate health services, treatment programmes, the establishment of a rural training centre for lower level health workers, nutrition rehabilitation, drugs and supplies, and immunization. Statistical data are included. (DP-E)

6708 **Bordia, N.L.** *Fifteen years progress of national tuberculosis programme.* Indian Journal of Tuberculosis (New Delhi), 25(1), 1978, 4-10. Engl.

The history of health services aimed at tuberculosis is traced by examining control measures outlined in India's 5-year plans from 1951-1977. By 1977, there were 610 tuberculosis clinics (308 with miniature radiography units), beds numbered 42 500 compared to 35 000 in 1962, and 224 million persons had received BCG vaccinations since 1950. The difficulties in implementing the plans are discussed. Epidemiological changes have made meningitis and miliary disease less common and led to a greatly increased incidence in elderly males. However, the author emphasizes that there are still 9 million tuberculosis patients, of whom only 1.5 million are being treated and most of these inadequately. Statistical data are included. (DP-E)

6709 **Butt, H.W.** Indo-Dutch Project for Child Welfare, Hyderabad, India. *Indo-Dutch Project for Child Welfare; annual report 1978.* Hyderabad, India, Indo-Dutch Project for Child Welfare, 1978. 1v.(various pagings). Engl. Refs.
See also entry 6710.

In 1978, the Indo-Dutch Project for Child Welfare sponsored in rural Hyderabad (India) a number of projects dealing with rural health services, the training of village health agents, child care, preschool and primary education for children, non-formal education for adults, women's clubs, dairy and poultry farming, a nutrition demonstration unit, and school gardens. This annual report reviews the activities of these projects, future plans, and financial implications. Lists of advisors are appended. (DP-E)

6710 **Butt, H.W.** Indo-Dutch Urban Project for Child Welfare, Hyderabad, India. *Indo-Dutch Urban Project for Child Welfare; annual report 1978.* Hyderabad, India, Indo-Dutch Project for Child Welfare, 1978. 1v.(various pagings). Engl.
See also entry 6709.

Features of the Indo-Dutch Project for Child Welfare (Hyderabad, India) in 1978 included the integrated health assurance plan, creches, preschool education programmes, non-formal education centres, and women's clubs. This annual report also discusses family coverage, community paricipation, and the contributions [illegible] various agencies, including voluntary workers. Financial implications are considered and lists of conferences and advisors are included. (DP-E)

6711 **Butt, H.W.** Indo-Dutch Urban Project for Child Welfare, Hyderabad, India. *Indo-Dutch Urban Project for Child Welfare; annual report 1977.* Hyderabad, India, Indo-Dutch Urban Project for Child Welfare, 1977. 1v.(various pagings). Engl.
See also entry 6712.

This annual report of the Indo-Dutch Urban Project for Child Welfare describes and evaluates a number of projects sponsored in urban Hyderabad (India) during 1977. These projects included an integrated health assurance plan, creches, preschool education programmes, a non-formal education centre, youth clubs, and women's clubs. The roles of government and international institutions and voluntary workers are discussed and the projects' financing is considered. Statistical data and lists of advisers are included. (DP-E)

6712 **Butt, H.W.** Indo-Dutch Project for Child Welfare, Hyderabad, India. *Indo Dutch Urban Project for Child Welfare, annual report 1977.* Hyderabad, India, Indo-Dutch Project for Child Welfare, 1977. 1v.(various pagings). Engl.
See also entry 6711.

This 1977 annual report describes the history, activities, accomplishments, and future plans of a variety of projects sponsored in India by the Indo-Dutch Project for Child Welfare. These projects include: schemes for rural health services delivery, such as mobile health centres and the training of village health agents called *grama avasthikas*; creches; educational programmes for preschool children, elementary students, and adults (*mahila mandals*); youth clubs; a newsletter; seminars, workshops, and conferences; village nutrition programmes; and poultry and dairy farming units. Lists of visitors to the projects are appended. (DP-E)

6713 **Cadotsch, A.** *Erwägungen zur Integration medizinischer Entwicklungszusammenarbeit in den kulturellen und sozioökonomischen Kontext des Einsatzgebietes; zum Beispiel der Arbeit des Putina-Ärzteteams in Peru. (Integration of health development cooperation into the cultural and socioeconomic context of the operational area; work of the Putina medical team in Peru).* Sozial- und Präventivmedizin (Zurich, Switzerland), 24(2-3), May 1979, 158-162. German. 18 refs.

Since 1971, a team of Swiss physicians has cooperated with the Peruvian government in setting up a basic health service in several rural health centres that could, if necessary, function without physicians. The pillars of the services are voluntary health auxiliaries (1:500 population) chosen by their own communities, state employed nurses (1:5 000 population), and state registered nurses, responsible for training and supervision. This paper discusses the progress of the programme in terms of its growing independence, the potential and limits of bringing it closer to the indigenous medical system, and recent set-backs that illustrate the country's growing dependence on the industrialized nations, with drug supply as an example. (HC-L)

6714 **Cervantes González, D.G.** *Programa de erradicación del paludismo en México y nuevos enfoques de su estrategia. (Programme for* *eradicating malaria in Mexico and new strategical approaches).* Salud Pública de México (Mexico City), 20(5), Sep-Oct 1978, 613-642. Span.

With the assistance of 20 maps and 5 tables of data, this paper reviews the epidemiological situation of malaria in Mexico from the adoption of a malaria eradication programme in 1955 to 1977. It also briefly describes changes in the strategy of malaria control that have been advocated by WHO since 1969 and the manner in which they have influenced Mexico's approach to the problem. (HC-L)

6715 **Chu, L.L.** *Planned birth campaigns in China, 1949-1976.* Honolulu, Hawaii, East-West Center, East-West Communication Institute, Case Study No. 5, Aug 1977. 142p. Engl. Refs.

This case study reviews the national policy decisions concerning family planning effected in the People's Republic of China from 1949-1976 and describes the supporting infrastructures of personnel and services. The transferability and limitations of the Chinese experience are also examined. Separate chapters cover: planned birth campaigns; their organization; information, education, and communication components; and contents and effects of planned birth propaganda. Related cultural issues are discussed in the appendices. (DP-E)

6716 **Colerato Ferrari, S.T., Dutra de Oliveira, J.E.** *Programa de suplementação e orientação alimentar para pré-escolares. (Preschool nutrition supplementation and education programme).* n.p., ABIA/SAPRO, Feb 1980, 16-22. Portuguese.

A pilot study was undertaken in Brazil to evaluate the feasibility of distributing food supplements to preschoolers aged 2-6 years through existing production and distribution networks. Over a 2-month period, 500 children received 400 ml of milk daily through local bar/food stores in periurban areas of Ribeirão Preto. Also, bimonthly health education meetings for mothers and store personnel were held. The project was found to be well-received by both participants and store owners and economical in terms of personnel and resources and is hence recommended for expansion. (HC-L)

6717 **Community Systems Foundation, Ann Arbor, Mich.** *Analysis of community-level nutrition programs.* Ann Arbor, Mich., Community Systems Foundation, Nov 1977. 74p. Engl.

This interim report to US AID outlines progress made by the Community Systems Foundation of Ann Arbor, Michigan, USA, during the 1st 6 months (May-October 1977) of a project to analyze community-level nutrition interventions. While the project aimed to investigate the most effective methods for improving the health and nutrition status of children in developing countries, particularly those methods applied to high-risk subgroups at the local level, the present document identifies and reports on intervention projects in Chile, Colombia, Haiti, Honduras, Jamaica, Guatemala, Malawi, Ghana, Thailand, Bangladesh, India, and Indonesia. Also described is the nutrition improvement programme of the Papago tribe in Arizona, USA. The report addresses the questions surrounding the measurement of success of an intervention and considers the need for a common and universal system for evaluating nutrition interventions. (EB)

6718 **Cravioto Meneses, A.** *Recent progress in the program for extending health service coverage to rural Mexico.* Bulletin of the Pan American Health Organization (Washington, D.C.), 13(3), 1979, 244-248. Engl.

In 1976, Mexico began a major national programme designed to provide universal health service coverage through extension of health services to rural and deprived urban dwellers; more efficient use of existing medical and sanitary services; increased community participation; strengthening of preventive health, health promotion, and sanitation measures; and, above all, the strengthening of family planning services. This paper describes the basic framework of the programme and its achievements as of January 1978. (HC-L)

6719 **Cruz Melo, A., Barria C., M., Patri, A., Sepulveda, H., Donoso García, M.E.** *Análisis de los siete primeros meses de funcionamiento del Centro de Rehabilitación de Lactantes Desnutridos de Quilicura. (First seven months of work at the Quilicura nutrition rehabilitation centre for malnourished infants).* Pediatría (Santiago), 19(1), 1976, 59-75. Span. 31 refs.

A 24-bed nutrition rehabilitation centre in Quilicura, Chile, provides malnourished infants aged up to 15 months with food, medical care, and growth monitoring for 12 hours per day, 7 days per week. It also offers classes in health and nutrition for their mothers. This paper describes, with the help of 28 tables, the features and performance of the centre and its clients during the 1st 7 months of operation. Underutilization (85%) of the centre and a lack of interest in the educational component are noted. (HC-L)

6720 **Day, F.A., Leoprapai, B.** *Patterns of health utilization in upcountry Thailand; a report of the research project on the effect of location on family planning/health facility use.* Bangkok, Mahidol University, Institute of Population and Social Research, 1977. 107p. Engl.

This final report sets forth the general data, major findings, and recommendations from a comprehensive project on the use of different types of health providers in Thailand. The results of four separate surveys showed that drugstores had universal appeal and wide use for both health and family planning needs. The hospitals were highly used, especially by urban populations, while the primary health care system experienced extreme underutilization because it was not attractive to the local rural people. Distance was also shown to have an inverse relationship to the use of government health facilities. In this report, a model of health search behaviour is presented, several reasons for differential use of health providers are suggested, and recommendations are offered for improving the present health system. (DP-E)

6721 **Diop, B., Collignon, R.** *Aspects ethiques et culturels de la psychiatrie en Afrique. (Ethical and cultural aspects of psychiatry in Africa).* Social Science and Medicine (Oxford, UK), 13B(3), Sep 1979, 183-190. Fren. 76 refs.

The authors first review current theories regarding the relationship between psychiatry, patients, and society before examining the specific situation in Senegal. They describe the development of mental health services in that country and underline the inadequacies of the institutional system. They also explore the relationship between psychiatry and traditional medicine, which could lead to new ways of treating mental illness based on a "village" system of treatment centres. They conclude by listing certain basic rights of developing countries in the area of mental health, including broad access to care, integration with public health, and a system adapted to the country's sociocultural background. (FM)

6722 **Dueñas Gómez, E., Riberón Corteguera, R.** *Neonatología en Cuba. (Neonatology in Cuba).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 86(5), May 1979, 406-419. Span. 10 refs.

Infant mortality and other statistical data are cited to illustrate the impact of improvements in neonatology in Cuba from 1968-1977. These include: better prenatal care; specialist, post-basic, and continuing education in neonatology for doctors and nurses; and more and better equipped neonatal facilities. (HC-L)

6723 **El Messiri Nadim, N.** *Rural health care in Egypt.* Ottawa, International Development Research Centre, 1980. 40p. Engl.

This study describes and analyzes the content and structure of formal and informal health services in rural Egypt, as well as the interrelations between the two systems. The author maintains that Egyptian villagers consult health practitioners from both systems to maximize available services and that the systems complement each other and are integrated to such an extent that it would be difficult to separate them when attempting to introduce change. A glossary and a section of conclusions and recommendations are included. (DP-E)

6724 **Gallegos Chacón, A.** *Desarrollo de la atención psiquiátrica en áreas semiurbanas y rurales de Costa Rica. (Development of psychiatric care in semiurban areas of Costa Rica).* Actas Psiquiátricas y Psicológicas de América Latina (Buenos Aires), 24(4), Dec 1978, 287-292. Span.

Since 1960, psychiatric care in Costa Rica has undergone a number of changes: there has been a gross increase in the number of psychiatrists, a shift in emphasis from inpatient to outpatient care, and a decentralization of services from a single asylum located in the capital to a number of outpatient facilities relying on general hospitals for inpatient care throughout the country. At present, 11 newly graduated psychiatrists are working in 5 semiurban, 4 semirural, and 2 rural locations. This paper reviews the history of the evolution of the services and outlines the system of incentives, support, and continuing education available to those who take postings outside of the capital region. (HC-L)

6725 **Gesler, W.M.** *Morbidity measurement in household surveys in developing areas.* Social Science and Medicine (Oxford, UK), 13D(4), Dec 1979, 223-226. Engl.

This report describes the construction and evaluation of a morbidity survey questionnaire that was administered to a sample of mothers of children aged less than 6 years in the target area of the family health clinic, Calabar, Nigeria. The questionnaire contained a list of symptoms—expressed in simple, everyday language—that could later be classified into three diagnostic categories by health centre staff. The advantages of such a questionnaire are that it is simple enough to be administered by lay personnel and understood by illiterates, yet reliable enough to serve as a basic for statistical analyses. (HC-L)

6726 **Guerrero Sandina, E.** *Programa de control de tuberculosis en Colombia. (Tuberculosis control programme in Colombia).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 86(5), May 1979, 398-405. Span.

Colombia's tuberculosis control programme was integrated with the general health services in the late 1960s and the years up to 1976 witnessed a considerable decline in morbidity and mortality occasioned by the disease. This paper discusses the programme and its achievements with the aid of six tables of statistical data from the years 1966-1976. (HC-L)

6727 **Harrison, K.A.** *Nigeria.* Lancet (London), 2(8155), 8 Dec 1979, 1229-1232. Engl.

One of the most important problems facing medical practice in Nigeria is the country's high perinatal and maternal mortality. This article examines these problems in Zaria, a city in northern Nigeria with a population of 200 000. Economic circumstances, deficiencies in medical care, and traditions and customs surrounding childbearing all contribute to the high death rates. There have been advancements in prevention, diagnosis, and management of contributing problems; the introduction of universal primary education and "Operation Feed the Nation" have also been helpful. Nevertheless, improvements in maternal and perinatal health are still dependent upon improvements in living standards. Statistical data are included. (DP-E)

6728 **Helmick, E., Nutting, P.A., McClure, W.T.** *Evaluation of Alaska native ambulatory health services; 2: appraisal of the continuity of the health care process.* Alaska Medicine (Anchorage), 20(5), Sep 1978, 67-69. Engl.

In February 1975, the Alaska Native Health Board (USA) undertook a study to evaluate the outpatient health services provided by the Alaska Native Health Service. A summary of the evaluation method and data illustrating the results, analysis, and interpretation are presented. A major finding was that comprehensive health services were often not continuous, i.e., that patients with problems identified during screening by a public health nurse frequently failed to receive a diagnostic evaluation from a physician or adequate follow-up care from the community health services. (DP-E)

6729 **Henderson, P.L., Biellik, R.J.** *Health and nutrition service delivery to refugees in the Somali Democratic Republic, 1980.* Disasters (Oxford, UK), 5(2), 1981, 104-112. Engl.

The delivery of health care to the refugees in Somalia during the 1980 crisis is summarized. General, supplementary, and therapeutic feeding programmes had to be instituted and, to a lesser extent, the disease, water, and sanitation situation demanded attention. The authors describe the action taken and the outcome for each of these problems. Some statistical data are included. (DP-E)

6730 **Holland, C.D., Durmaskin, B.T.** *Progress in the development of rural primary care clinics in West Virginia.* Public Health Reports (Rockville, Md.), 94(4), Jul-Aug 1979, 369-371. Engl.

West Virginia, a US state, has developed a network of 63 non-profit clinics (54 within the last 8 years) to serve the needs of its rural population. Factors contributing to the progress of this system include: the United Mine Workers of America's (a labour union) Health and Retirement Funds, which cover 17% of the population; the cooperative efforts of the Regional Medical Program, the Appalachian Region Commission, and the Claude Worthington Benedum Foundation, which fund other clinics; the staffing of 25 of the clinics by National Health Service Corps physicians; the ready availability of foreign-trained immigrant physicians, who make up 32.6% of West Virginia's primary care pool; federal funds channeled through the Department of Health, Education, and Welfare; and evolving rural clinic management systems. (DP-E)

6731 **Hollins, F.R.** *Tuberculosis in the African community of Salisbury, Rhodesia; a three year review.* Central African Medical Journal (Salisbury), 25(5), May 1979, 93-98. Engl.

Reorganization of tuberculosis treatment and control services in greater Salisbury, Rhodesia, resulted in a definite reduction of the incidence of the disease in the city from 1975-1977. This paper outlines these control measures and discusses their impact in terms of mortality, disease incidence, notification rates, demand for hospital beds, and attitudes of patients and public toward the services. Of particular significance is the fact that all changes were implemented without any increase in funds, staff, or other resources—a most important consideration for any developing country. (HC-L)

6732 **José, A.M.** *Study on the nutrition information needs of some community workers in regions II and IV.* Philippine Journal of Nutrition (Manila), 30(4), Oct-Dec 1977, 193-204, 208. Engl.

To assess whether nutrition education and information leaflets and pamphlets were reaching community workers in two areas of the Philippines, 96 responses to 147 questionnaires sent by mail were examined. Most respondents had obtained their information material at a seminar or conference; they prepared posters, pamphlets, manuals, leaflets, comic books, magazines, and newsletters, in that order; and few wanted flipcharts, bulletins, books, brochures, slides, or photographs. Of 16 selected methods of distributing the material, postal delivery was the most favoured. More material is needed, preferably in local dialects, and use of radio and television may be extended because extension workers obtain information from them. Statistical data are included. (Modified journal abstract)

6733 **Kleinman, A., Mechanic, D.** *Some observations of mental illness and its treatment in the People's Republic of China.* Journal of Nervous and Mental Disease (Baltimore, Md.), 167(5), May 1979, 267-274. Engl. 21 refs.

The low rates of mental illness reported in the People's Republic of China may be due to narrow definitions of disorder and to the classification of personal and social distress as physical conditions. Acute mental health services are provided at commune and county hospitals and special psychiatric hospitals are maintained for more intractable cases. Chronically disturbed patients may receive long-term care in sanatoria associated with large industries or be maintained in home beds in their production brigades assisted by family and barefoot doctors. Psychiatric teaching in hospitals is similar to psychiatric teaching in Western countries. (Modified journal abstract)

6734 **Lampang Health Development Project, Lampang, Thailand.** *Lampang Health Development Project; Thailand's fresh approach to rural primary health care.* Essex, Conn., International Council for Educational Development, Project to Help Practitioners Help the Rural Poor, Case Study No. 7, 1979. 90p. Engl.

This publication describes how the Lampang Health Development Project (Thailand) evolved and gives an assessment of its progress and impact to date. The major goals of this project are to: increase health care coverage to rural areas, women of child bearing years, and children; establish an integrated model of health service delivery extending to every village through a health worker network; and set up a low-cost health care system. Also discussed are the project's organization, personnel, management, the problems encountered, and an appraisal of its replicability, costs, and resources. Statistical data are included. (AF)

6735 **Lombardi, C.** *Situação do atendimento do paciente venéreo nas unidades sanitárias da Secretaria da Saúde do Estado de São Paulo, Brasil. (Care of the venereal patient in health centres of the health department of the state of São Paulo, Brazil).* Revista de Saúde Pública (São Paulo, Brazil), 12(1), 1978, 16-22. Portuguese. 24 refs.

This paper presents and discusses the results of a questionnaire on the care of the venereal patient in 340 health centres in São Paulo, Brazil. In the judgment of nearly all of the physicians in charge of the centres, facilities were considered inadequate for controlling venereal diseases and were underutilized by the public. *In situ* laboratory facilities for diagnostic purposes, routine screening for syphilis, standard treatment regimens, and public education are called for if the centres are to assume a significant role in the control of venereal diseases. (HC-L)

6736 **McMichael, J. ed(s).** *Health care for the people; studies from Vietnam.* Boston, Mass., Alyson, 1980. 341p. Engl. Refs.

Written and compiled by Vietnamese doctors, pharmacists, and others who recognize the health care problems in their own country and can assess and utilize the resources available, these studies cover all facets of Vietnamese medicine, public health and hygiene, the selection and training of health personnel, research, pharmacists, and traditional medicine and pharmacy, as well as epidemics and disasters. Legislative and organizational measures used to cope with these health problems are also discussed. (AF)

6737 **Medical Research Centre, Nairobi. Royal Tropical Institute, Amsterdam.** *Outpatient department; health services research in Kenya.* Tropical and Geographical Medicine (Haarlem, Netherlands), 31, 1979, Suppl. IV, S1-S70. Engl. Refs.

See also entries 6306 and 6754.

This paper describes the materials, methods, and results of baseline and experimental studies in operations research and surveys of patient satisfaction that were conducted in the outpatient department of Machakos Hospital, Kenya, from 1968-1972. (HC-L)

6738 **Mooney, M.** *Assessing rural health education programmes in Rhodesia.* International Journal of Health Education (Geneva), 22(4), Oct-Dec 1979, 149-252. Engl.

Also published in French and German.

On the basis of project evaluations written by 50 Rhodesian health workers, the author identifies 10 factors important to the success of any health project and creates a project model for health extension workers. The two most important factors are basing projects on the people's felt needs and educating them in advance about the importance of each project. The health worker should also consider the financing and timing of the project, serve simple refreshments, and hold a closing ceremony. Reasons for project failure are also given. (DP-E)

6739 **Nsanzumuhire, H., Lukwago, E.W., Edwards, E.A., Stott, H., Fox, W.** *Study of the use of community leaders in case-finding for pulmonary tuberculosis in the Machakos district of Kenya.* Tubercle (Edinburgh), 53(3), 1977, 117-128. Engl. 8 refs.

The purpose of this study in the Machakos area of Kenya was to investigate the potential effectiveness of identifying cases with symptoms suggestive of pulmonary tuberculosis in the community by interrogation of community elders and household heads. Village elders named 363 suspected cases, while a survey of household heads identified 1 716 possible patients, of whom 172 had previously been named by the elders. Sputum specimens were also collected from a random sample of 20% of households and the central tuberculosis register was reviewed. It is concluded that the yield of cases produced by the elders was disappointing; while surveying household heads was more effective, because of the workload it is not practical for routine use. Statistical data are included. (DP-E)

6740 **Oldshue, R., Shange, E., Vost, D.A.** *Maternal and child care services in rural Kwazulu.* South African Medical Journal (Cape Town), 55(9), 3 Mar 1979, 344-346. Engl.

A survey of 200 rural Zulu mothers was conducted by means of personal interviews to obtain information on maternal child health (MCH) services, identify specific needs and problems, and assess the effectiveness of local MCH services. The results revealed a very low household income, acceptance of both traditional and Western health practices during pregnancy, a widespread demand for well-baby services in contrast to the underuse of available child health facilities, and considerable ignorance of general health matters. Better housing, education, and employment opportunities, rather than better medical services, are recommended. (DP-E)

6741 **Pan American Health Organization, Washington, D.C.** *Annual report of the director, 1978.* Washington, D.C., Pan American Health Organization, Official Document No. 165, Aug

1979. 150p. Engl.

This report describes the activities of the Pan American Health Organization during 1978 in its efforts to cooperate with member countries in the following areas: comprehensive health services, including the strengthening of health systems; administration, planning, and information; disease prevention and control; environmental protection and the control of environmental factors detrimental to health; multidisciplinary development of human resources at all levels, with emphasis on intermediate and auxiliary personnel; and promotion of biomedical and social research. Some statistical data are included. (HC-L)

6742 **Perlstadt, H., Kozak, L.J.** *Emergency medical in small communities; volunteer ambulance corps.* Journal of Community Health (New York), 2(3), Spring 1977, 178-188. Engl. 12 refs.

This paper examines volunteer ambulance corps that provide emergency medical care and transportation to their communities. The authors have compared volunteer corps to all ambulance systems in Michigan (USA) and have focused on the relationships between organizational characteristics such as membership and community characteristics as indicated by town size, and the support base for the volunteer corps. They conclude that government support for voluntary associations such as ambulance corps improves health care delivery in small communities. Statistical data are included. (Modified journal abstract)

6743 **Petrakov, B.D., Ermakov, V.V.** *Dispensary care method as a socioprophylactic basis of the outpatient care provided to the population in the U.S.S.R.* Santé Publique (Bucharest), 20(2), 1977, 127-137. Engl. 26 refs.

The rationale for using dispensaries as the principal unit of outpatient care in the USSR is examined. The preventive and curative importance of the dispensaries in the present stage of development of the socialist health care system is emphasized. The organization of the system is discussed and its effects on mortality and health status are examined. Statistical data are included. (Modified journal abstract)

6744 **Rao, C.K.** *On the national filaria control programme.* Indian Journal of Public Health (Calcutta, India), 23(1), Jan-Mar 1979, 3-6. Engl.

India's national filariasis control programme was launched in 1955 and evaluated in 1961 and 1970. The recommendations resulting from the 2nd evaluation include supplementing anti-larval operations in urban areas by establishing treatment clinics, organizing rural control measures on a regional basis, and surveying endemic states every 4-5 years. This article also discusses the problems posed by filariasis in India, the organization of the control programme, its performance, and research and training activities. (DP-E)

6745 **Rotter Pelá, N.T.** *Contribuição ao estudo da assistência pré-natal em um município Paulista. (Prenatal care in a municipality of São Paulo).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 86(1), Jan 1979, 46-54. Portuguese. 22 refs.

In Ribeirão Preto, Brazil, 1 018 women in six hospitals were interviewed regarding the quantity and quality of their prenatal care, their socioeconomic characteristics, etc. It was found that 91.2% had attended at least one prenatal consultation, that 57.1% had initiated prenatal care during the 1st trimestre of pregnancy, and that the average number of consultations was 5.5; however, only 5.4% of the women were deemed to have received "effective" care, i.e., care that commenced during the 1st trimestre, comprised at least six consultations, and included the prescribed laboratory examinations. Further discussion and analysis of the findings are given in this paper. (HC-L)

6746 **Saliternik, Z.** *Specific methods of control and eradication of schistosomiasis in Israel.* Tropical and Geographical Medicine (Haarlem, Netherlands), 31(2), Jun 1979, 175-184. Engl. 15 refs.

This review of the epidemiological status of urinary and intestinal schistosomiasis in Israel concentrates on the ecology, distribution, and control of the snail vector. *Biomphalaria alexandrina* was eradicated through ecological factors (salinity and pollution by sewage) and by chemical agents, although there were reoccurrences after chemical applications. Most effective were combined measures, which included increasing water currents to over 20 cm:second, rapid emptying and drying up of water reservoirs, weekly deflection of infected water courses in different directions, etc. The last case of schistosomiasis in Israel was reported in 1955. (DP-E)

6747 **Serpenti, L.M.** *Strengthening of Kabupaten health services Kakanganyar, central Java.* Annales de la Société Belge de Médecine Tropicale (Brussels), 59, 1979, Suppl., 71-80. Engl.

In order to maximize the utilization of rural health services, two types of methodologies were tested in an Indonesian village: those that improve the quality of the service and those that encourage community participation. The most effective of the 1st type was home visiting and, of the 2nd, the development of a system of village health workers and the introduction of a health insurance scheme. These measures were carried out with the help of village authorities, which resulted in serious difficulties, so that health-related decisions are now made on the family level. (DP-E)

6748 **Shah, P.M.** *Kasa MCHN Project: integrated mother-child health-nutrition model; the third progress report; April 1976-March 1977.* Maharashtra, India, CARE-Maharashtra, 1977. 64p. Engl.
Unpublished document; see also entry 6958.

The 3rd progress report of the Kasa Mother-Child Health-Nutrition Project discusses activities carried out during the 2nd year of operation. Simple medical care was added to the responsibilities of the village health workers, who became more established in the community. The project was also used to train personnel from the Integrated Child Development Scheme. Difficulties with record-keeping, information flow, and field supervision continued during the 2nd year. Research on the impact of the programme on health status was hampered by lack of accurate, complete data. The report concludes by underlining government recognition of the community health worker concept as an important means of extending rural health care. (FM)

6749 **Tanaka, O.Y.** *Evaluación de la atención infantil en un consultorio periférico y un programa de educación en servicio en alimentación-nutrición. (Assessment of child care and a programme of in-service nutrition education).* Pediatría (Santiago), 19(1), 1976, 47-52. Span.

Analysis of the information contained in 171 randomly-selected medical records of children aged less than 5 years at a clinic in Santiago, Chile, revealed that risk factors for malnutrition included low birth weight, poor clinic attendance, position in family (5th or more), age of mother (30 years or more), and malnourished sibling(s). It also showed that the staff often neglected to fill out part of the medical record and sometimes gave out inadequate dietary advice. On the basis of these findings, an in-service training programme was designed and administered to all staff members, with positive results. Statistical data are included. (HC-L)

6750 **University of Ghana Medical School, Department of Community Health, Accra. University of California, School of Public Health, Division of Population, Family and International Health, Los Angeles.** *Danfa Project: final report.* Accra, University of Ghana Medical School, Department of Community Health, 30 Sep 1979. 1v.(various pagings). Engl.

This final project report evaluates the Danfa Comprehensive Rural Health and Family Planning Project that was begun in Ghana in the 1960s. After a summary and the presentation of the conclusions and recommendations, various sections provide detailed information on objectives, project organization and management, health status, health care delivery, fertility, family planning, institutional development and information transfer, and attainment of goals and objectives. Photographs and copious statistical data are included. (DP-E)

6751 **University of Sussex, Institute of Development Studies, IDS Health Group, Brighton, UK.** *Health needs and health services in rural Ghana; volume II: appendices.* Brighton, UK, University of Sussex, Institute of Development Studies, Aug 1978. 187p. Engl.
See also entry 6752.

Volume II contains 18 appendices with supporting data for the main body of the report in volume I. These include a breakdown of primary care tasks and organization of resources, a questionnaire to evaluate maternal child health and polyclinic care, and a list of criteria used to assess the range of services provided, utilization rates, and the efficiency of health services. Other appendices include data on the population covered by the study and individual evaluations of polyclinic care, child health services, maternity care, communicable disease control, and environmental sanitation. A detailed study of child nutrition is also presented. Data on resource allocation and on assessment of physical and manpower resources is followed by a summary of organizational assessment and a description of the villages studied. (FM)

6752 **University of Sussex, Institute of Development Studies, IDS Health Group, Brighton, UK.** *Health needs and health services in rural Ghana; volume I.* Brighton, UK, University of Sussex, Institute of Development Studies, Jun 1978. 274p. Engl. Refs.
See also entry 6751.

Volume I of this report contains the main findings of the study carried out on health services in rural Ghana from 1975-1977. Part 1 outlines the methodology used. Part 2 describes the health care system in the districts studied with chapters on utilization, coverage, and quality of care in the areas of maternal child health, control of communicable diseases, and environmental sanitation. Part 3 examines patterns of resource allocation for facilities, equipment, transport, and medical record-keeping, as well as the organization and training of staff. Part 4 discusses aspects of alternative health programmes, including the role of community participation and leadership, and recommends a general strategy for improved primary care. (FM)

6753 **Vathesatogkit, P., Charoenpan, P., Sawasdi, S., Wathana-Kasatr, S., Sukumalachantra, Y.** *Results of treatment of culture positive cases of tuberculosis at Ramathibodi Hospital between 1970-1974.* Journal of the Medical Association of Thailand (Bangkok), 62(6), Jun 1979, 296-301. Engl. 13 refs.

Retrospective analysis of 234 cases of tuberculosis seen at Ramathibodi Hospital, Bangkok, Thailand, revealed that a high percentage of patients harboured drug-resistant organisms and that a high percentage defaulted, particularly in the retreatment group and among those from outside the city. The rate of treatment was highest (53%) for patients treated in the hospital's pulmonary clinic but hardly satisfactory. It is suggested that patients be referred for treatment to the facility nearest their homes, that their regimen be geared to their economic capability (i.e., that thiacetazone be substituted for more expensive drugs where advisable), and that all retreatment cases be tested for drug sensitivity. Statistical data are included. (HC-L)

6754 **Vogel, L.C., Dissevelt, A.G.** *VII. Operational research on health services.* Tropical and Geographical Medicine (Haarlem, Netherlands), 29, 1977, Suppl., S51-S55. Engl. 24 refs.
See also entries 6306 and 6737.

This paper summarizes the work of the Kenya Netherlands Project for Operations Research in Outpatient Services (Kneporos) in Kiambu and Machakos Districts, Kenya, from 1968-1976. A list of 24 publications arising from the research is included. (HC-L)

6755 **Walia, B.N.** *Challenge of infant mortality in India.* Health and Population (New Delhi), 2(1), Jan-Mar 1979, 26-31. Engl. 8 refs.

The most pressing problems in the delivery of child health services in India, particularly budgetary restraints, the quantity and quality of health manpower, unrealistic work schedules, and drugs and drug supplies, are examined. A strategy for reducing infant mortality due to neonatal causes, diarrhea, respiratory infection, and malnutrition is presented and suggestions are given for better training of manpower for child health services, continuous supply of drugs and equipment, and adoption of a methodology for identifying at-risk children. (DP-E)

6756 **Williams, I.M.** *UN/Thai programme for drug abuse control in Thailand—a report on phase I: February 1972-June 1979.* Bulletin on Narcotics (New York), 21(2), Apr-Jun 1979, 1-44. Engl.
Also published in French and Spanish.

This paper describes the principal achievements of the UN/Thai pilot programme for drug abuse control that was carried out from 1972-1979 in 5 key villages and 25 satellite villages in northern Thailand. The major components of the programme were crop replacement and community development, treatment and rehabilitation, and drug information and education. The Thai government has accepted this project as a model for greatly expanded programmes for the eradication of opium poppy cultivation. Two key villages included in the pilot programme have proven to be opium free. Lists of reports written on specific aspects of the programme are included. (Modified journal abstract)

V.3 Planning

6757 **Ansell, C.** *Health care in the Yemen.* Midwife, Health Visitor and Community Nurse (London), 14(12) Dec 1978, 425-429. Engl.

The author questions the appropriateness of a maternal and child health centre in Sanaa, Yemen, in the light of the following socioeconomic factors: an emigrant workforce whose remittances bring in considerable money but undermine economic effort at home; a very low educational level with ignorance of the causes of disease, etc.; a scarcity of trained health workers; and the traditionally low and deteriorating position of women in society. (HC-L)

6758 **Banerji, D.** *Health and population control in the sixth plan of India.* IFDA (Geneva), Apr 1979, 1-10. Engl.

India's 6th 5-year health plan, like its five predecessors, is actually a health services plan that has failed to determine health services allocations within the context of other health components (sanitation, nutrition, education, etc.) and the national plan as a whole. This paper analyzes the shortcomings of the plan, showing how they are rooted in the different interests of the wealthy ruling classes and the poor masses and in a reliance on administrative leaders and programme machinery whose incompetence has already been demonstrated. (HC-L)

6759 **Christian Medical Commission, Geneva.** *Principles and practice of primary health care.* Contact (Geneva), Special Series No. 1, Apr 1979, 1-112. Engl.

This special issue of Contact concerning the principles and practice of primary health care contains articles written by ten authors. Topics discussed are community medicine, appropriate health care technology, technology in medicine, some ideas and examples of medical auxiliary use, the under-fives' clinic, primary health care and the village health worker, primary health care as the new priority, health care in the context of self-reliant development, development of a community health programme, etc. Also included is a paper on non-governmental organizations and primary health care presented at the Alma-Ata Conference. (AF)

6760 **Grosse, R.N., de Vries, J.L., Tilden, R.** American Public Health Association, Washington, D.C. USA, Agency for International Development, Department of State. *On the statistical implementation of a health sector resource allocation model in Indonesia.* Washington, D.C., American Public Health Association, International Health Programs, 1978. 54p. Engl.

A computerized resource allocation model for comparing the effectiveness of levels of medical care and health programmes such as nutrition, immunization, and vector control is being tested at the Centre for Health Services Research and Development in Surabaya, Indonesia. This project report describes the background, the computer technology transfer, and the problems and findings with regard to the survey design, the development of a management information system for health centres, and the capacity for computation; it also presents recommendations. Appendices include an item and classification list, a disease list, a model algorithm, and a sample register. (DP-E)

6761 **Mongin, C.** *Frères des hommes—des actions participatives à la base visent à satisfaire les besoins prioritaires: de la théorie à la pratique. (Brothers and all men—actions with grass roots participation aimed at satisfying priority needs: from theory to practice).* Sozial- und Präventivmedizin (Zurich, Switzerland), 24(2-3), May 1979, 195-197. Fren.

This paper briefly analyzes why many self-help projects initiated by foreign agencies in the Third World meet with failure. Such projects can only survive in the presence of a rare conjunction of circumstances: a dynamic popular impetus based on a solid community organization and a clearly-defined national policy backed up by adequate funding. Also, the irony of Europeans, who are even more dependent and less autonomous with regard to medicine than are Third World citizens, trying to export a notion of self-help is pointed out. (HC-L)

6762 **Villegas, H., Valverde, C.A.** *Life expectancy trends in Costa Rica.* Bulletin of the Pan American Health Organization (Washington, D.C.), 13(3), 1979, 253-256. Engl.

Also published in *Boletín de la Oficina Sanitaria Panamericana*, 1979.

Costa Rica's 1971-1980 national health plan aimed to increase life expectancy at birth to slightly over 71 years through a rural health programme comprising communicable disease control, basic environmental health, and maternal and child health care. Analysis of mortality data before (1970-1972) and following (1974-1976) programme implementation revealed that life expectancy had jumped from 67.71-71.15 years and that gains made were associated with the degree of coverage provided and the duration of programme implementation. Costa Rica had thus surpassed its goal in 5 years rather than the expected 10. (HC-L)

V.4 Geographical Distribution of Health Services and Workers

6763 **Imperato, P.J.** *Health care systems in the Sahel: before and after the drought.* In Glantz, M.H., ed., The Politics of Natural Disaster; the Case of the Sahel Drought, New York, Praeger, 1976, 282-302. Engl. Refs.

After discussing the geography, economy, and population of the Sahel, the author examines the principal health problems of the area with emphasis on communicable diseases. Before the drought, the health system consisted mainly of isolated dispensaries and a few mobile units whose impact on the nomadic population was negligible. After the drought greatly aggravated existing health problems, especially malnutrition, the nomads became the recipients of large-scale preventive and curative health services for the 1st time. It is hoped that, even though many nomads have returned to their traditional life-style, they will continue to avail themselves of either mobile or fixed health services now that they are aware of the benefits that can be obtained. Statistical data are included. (DP-E)

6764 **Stommes, E., Sisaye, S.** *Development and distribution of health care services in Ethiopia: a preliminary review.* Canadian Journal of African Studies (Ottawa), 13(3), 1980, 487-495. Engl.

Since the creation of the ministry of public health in Ethiopia in 1947, many improvements have been made in the structure of the health care system and in the training and distribution of health personnel. The proportion of expatriates working in health care, particularly at the professional level, has been considerably reduced and by 1972 about 30% of all doctors were Ethiopian, while Ethiopian nurses outnumbered expatriates 6:1. As the major responsibility for health care shifted from the private sector to the government, the level of services increased. However, the increases tended to be concentrated in urban areas and much remains to be done to redistribute health facilities and personnel more equitably. Statistical data are included. (FM)

6765 **WHO, Geneva.** *World health statistics annual, 1980; personnel and hospital establishments/ Annuaire de statistiques sanitaires mondiales, 1980; personnel de santé et établissements hospitaliers.* Geneva, WHO, 1980. 153p. Engl., Fren.

Presented as statistical data and recorded by geographical regions, countries, and WHO regions, information is provided on hospital establishments and health personnel throughout the world in 1977. Hospitals and other medical establishments with beds, and their utilization, include general, local or rural, medical, maternity, and other specialized institutions. Hospital personnel, listed by world region or country, year, number, population, and medical density, include physicians, physicians' assistants, interns, residents, nurses, assistant/auxiliary nurses, midwives, and assistant/auxiliary midwives. (AF)

V.5 Financial Aspects

See also: 6684.

6766 **Austin, J.E.** *Perilous journey of nutrition evaluation.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(12), Dec 1978, 2322-2326. Engl.

This paper outlines the basic questions nutritional programme evaluation must address and presents a framework for data collection and evaluation. The technical, financial, psychological, and political barriers to evaluation are examined. Evaluation personnel, the technical requirements of the data, and the resources available are also discussed. Details are given on target group identification, costing procedures, and performance indicators. Three major types of performance indicators are considered: biological cost-effectiveness measures, delivery system cost-effectiveness measures, and operating-effectiveness measures. Statistical data are included. (Modified journal abstract)

6767 **Bertera, R.L., Green, L.W.** *Cost-effectiveness evaluation of a home visiting triage program for family planning in Turkey.* American Journal of Public Health (New York), 69(9), Sep 1979, 950-953. Engl.

Graduate Turkish midwives were trained in triage rules for determining family planning home visit frequency based on risk of couples. In a sample of 543 couples followed for 6 months, modern contraceptive use increased 22% among high-risk and about 15% among moderate- and low-risk couples. After taking into consideration fecundity, contraceptive success, and pregnancy complications, the estimated average cost per complication averted was $61.00 for high-risk, $177.00 for moderate-risk, and $526.00 for low-risk couples. Statistical data are included. (Modified journal abstract)

6768 **Carvalho, J.A., Wood, C.H.** *Mortality, income distribution, and rural-urban residence in Brazil.* Population and Development Review (New York), 4(3), 1978, 405-420. Engl. 33 refs.

Special tabulations of the census figures for 1940, 1950, and 1970 have been used to estimate life expectancy at birth in Brazil by region, rural or urban residence, and household income. Analysis of these data suggest that social class differentials decline as mortality falls from high to moderately high levels but increase with further mortality decline, presumably as the causes of death become less amenable to public health measures and more a function of personal purchasing power. Discussion focuses on the relationship between mortality, development policies, and patterns of economic growth. (HC-L)

6769 **Halevi, H.S., Ever-Hadani, P.** *Health expenditure under multiple-priority pressures: a case study of Israel.* Israel Journal of Medical Sciences (Jerusalem), 15(1), Jan 1979, 43-54. Engl. 21 refs.

Since its inception, Israel has faced many problems that have a high priority in the national consciousness, particularly those of defense and national security. An analysis of government policy since the early 1950s shows how health expenditure has been given a high priority in the evaluation of the nation's needs on the one hand and been influenced by defense and equally pressing requests on the other. It is concluded that health receives a fair share of the nation's resources but, in view of the country's strained economic situation, careful planning for future health in coordination with other welfare services is essential. Statistical data are included. (Modified journal abstract)

6770 **Kercek, M.** *Health problems of developing nations; part II: the role of UNICEF.* Canadian Medical Association Journal (Ottawa), 120(5), 3 Mar 1979, 589-595. Engl.

This article briefly describes some primary care programmes staffed by auxiliary health workers that have been successfully implemented in Pakistan, India, and Niger and training programmes for traditional birth attendants in Ghana, Sierra Leone, and the Sudan. The role of traditional medicine and practitioners is also discussed. UNICEF's contribution to these programmes is largely financial and UNICEF itself is funded entirely by donations. The contributions of various developed countries to the UNICEF budget are examined in detail. Sweden, Norway, Denmark, and the Netherlands, whose contributions comprise 41% of UNICEF's total budget, have been especially generous. (DP-E)

6771 **Parker, R.L., Taylor, C.E., Kielmann, A.A., Srinivas Murthy, A.K., Uberoi, I.S.** *Narangwal experiment on interactions of nutrition and infections; III: measurement of services and costs and their relation to outcome.* Indian Journal of Medical Research (New Delhi), 68(12), Dec 1978, Suppl., 42-54. Engl.

As part of the Narangwal nutrition project, a number of villages in India were provided with varying combinations of medical care and nutrition supplementation to children aged less than 3 years. At the same time, data on the quantity, cost, and benefits of the various service inputs and activities were gathered with a view to generating information on what and how programme effects have been achieved. This paper presents and discusses an analysis of the data for the years 1970-1973. It is interesting to note that 95% of the service inputs, which significantly affected morbidity and mortality in the study population, were provided by family health workers and village attendants. (HC-L)

6772 **Walsh, J.A., Warren, K.S.** *Selective primary health care; an interim strategy for disease control in developing countries.* New England Journal of Medicine (Boston, Mass.), 301(18), 1 Nov 1979, 967-974. Engl. 86 refs.

Priorities among the infectious diseases affecting the 3 billion people in the developing world are usually based on prevalence, morbidity, mortality, and feasibility of control. With these priorities in mind, a programme of selective primary health care is compared with other approaches and suggested as the most cost-effective form of medical intervention in developing countries. A flexible programme delivered by either fixed or mobile units might include measles, tetanus, and DPT immunization, treatment for malaria, oral rehydration for children, and promotion of breast-feeding. Other activities could be added on the basis of regional needs and new developments. Interim (and more expensive) strategies include vector control, nutrition supplementation, and water and sanitation programmes. Statistical data are included. (DP-E)

6773 **WHO, Geneva.** *Financing of health services; report of a WHO study group.* Geneva, WHO, WHO Technical Report Series No. 625, 1978. 117p. Engl.
WHO Study Group on the Financing of Health Services, Geneva, Switzerland, 21-25 Nov 1977.

Information on all sources of health services financing is essential to the development of comprehensive health plans and, in particular, to the identification of those groups of a population that do not have reasonable access to health care. The method used to discover this information must be simple and not prohibitively expensive. This report outlines examples of studies of health care financing that were undertaken in Bangladesh, Botswana, the Republic of Korea, Senegal, fourteen African countries, and Latin America and concludes that it is indeed possible to collect and analyze data of sufficient reliability, even from the elusive private sector, to make the exercise worthwile. (HC-L)

V.6 Cultural Aspects

See also: 6723, 6763.

6774 **Anwar, J., Sutanto, A.H., Effendi, H., Sembiring, N, Tarigan, R.** *Survey on traditional healers in 5 regencies in North Sumatra, Indonesia.* Medan, Indonesia, University of North Sumatra, Medical School, 1978. 164p. Engl.

After some background data on North Sumatra (Indonesia) and a description of the survey methodology, information is presented on the characteristics of *dukuns*, or traditional healers, their treatment rituals, and comparisons of treatment rituals of the major specialties in each of the areas surveyed. Additional characteristics of the *dukuns* (age, religion, marital status, etc.) and their concepts of the causes of disease are also discussed. The position of the *dukuns* in their community and *vis-à-vis* Western medicine is examined. A list of *dukun* specialties includes skin diseases, broken bones, poisons, coughs, sterility, fever, urinary stones, etc. Many chapters contain statistical data. (DP-E)

6775 **Bergstrom, S., Haglund, B., Xaba-Mokoena, M.** *Halso-och sjukvard i Sydafrika: dokumentation om apartheidpolitikens medicinska konsekvenser. (Health and medical care services in South Africa: international documentation on the medical consequences of apartheid policies).* Lakartidningen (Stockholm), 76(13), 1979, 1189-1194. Engl., Swedish.

During the international anti-apartheid year of 1978, the World Health Organization made scathingly critical pronouncements against the apartheid system and against the economic exploitation to which blacks in South Africa are subjected and which results in high morbidity and mortality in the black population. Health statistics and surveys made of the health of the black population may be viewed as a manifestation of the prevailing policy of racial segregation, which is a necessary condition for further exploitation of cheap, forcibly displaced black labour. More than most other data, health statistics constitute the body language of the oppressed. This article gives a summary of international documentation on the medical consequences of apartheid. (Modified journal abstract)

6776 **Chaudhuri, S., Ghosh, S., Chakraborty, T., Kundu, S., Hazra, S.K.** *Use of a common Indian herb "mandukaparni" in the treatment of leprosy.* Journal of the Indian Medical Association (Calcutta, India), 70(8), 16 Apr 1978, 177-180. Engl. Refs.

Mandukaparni (*Centella asiatica*) is a common Indian plant that grows in marshy places. It contains the glucoside asiaticoside. Following favourable reports on its use in treating leprosy in the 1950s, the authors describe a trial in which 15 untreated lepromatous patients were given pills made from the crushed whole plant daily for 1 year. The progress of the 12 who completed the regime is compared to that of 10 lepromatous patients on standard dapsone therapy. The clinical and bacteriological progress of the test group compared favourably with that of the controls and there were no reported side effects. Statistical data are included. (Modified journal abstract)

6777 **Edwards, G.** *Drinking problems; putting the Third World on the map.* Lancet (London), 2(8139), 25 Aug 1979, 402-404. Engl. 37 refs.

The extent of alcohol-related problems in Africa, South and Central America, Asia, the Pacific Islands, the Caribbean, and Alaska, especially among the Eskimos, is examined. The impact of alcohol on developing countries has some special features: professional groups and those undergoing rapid urbanization are especially prone to take up drinking; the young are vulnerable because there is no one to teach them how to drink properly; and excessive drinking contributes to crime and malnutrition, strains already overburdened health resources, and retards national development. This situation could be changed by stressing social values and social responsibility, taxing and licensing alcohol production, and health education. (DP-E)

6778 **Joseph, F.G.** *Effects of inappropriate laws in developing countries—an illustrative case.* Public Health (London), 93(5), Sep 1979, 317-322. Engl.

The case history of a young unmarried Kenyan woman, who gave birth to triplets as the result of an unwanted pregnancy, could not care for or feed them properly, and eventually sold them in desperation when faced with a 2nd pregnancy, is presented. The author discusses a number of inadequacies in the social, legal, welfare, and health systems that are illustrated by this case history, including the lack of liberal abortion laws, the failure of the health services to provide family planning counselling to the mother or adequate care to the children, and the poverty and lack of opportunity that exacerbated all the mother's problems. (DP-E)

6779 **Khan, A.Q.** *Traditional medicine in community health services in China.* Bangladesh Medical Journal (Dacca), 7(1-2), Jul-Oct 1978, 18-44. Engl.

This paper is based on a WHO-sponsored study tour of the People's Republic of China that included visits to local hospitals and facilities, research institutions, teaching hospitals, colleges of traditional medicine, and pharmaceutical plants. It discusses: the organization of services at the brigade, commune, and county levels; medical and barefoot doctor training; the role of traditional medicine, particularly acupuncture, moxibustion, and herbal treatment, in current medical practice; and the management of burns using traditional herbal medicine. Some recommendations aimed at tapping traditional medical resources in Bangladesh are put forward. (HC-L)

6780 **Koh, T.H.** *Breast-feeding in Sarawak.* British Medical Journal (London), 280(6207), 12 Jan 1980, 95-96. Engl.

Interviews with 87 urbanized Chinese mothers attending two maternal and child health clinics in Kuching, Sarawak, Malaysia, revealed that only 67% breast-fed their babies and that only 25% and 10% breast-fed for longer than 1 month and 3 months, respectively. These disappointingly low percentages are attributed to the fact that there are no coordinated efforts in Sarawak, Malaysia, to encourage breast-feeding; on the other hand, advertisements for milk powders abound, even in the maternal and child health clinics. Some local traditions related to childbirth are also discussed. (HC-L)

6781 **Kuhnlein, H.V., Calloway, D.H.** *Contemporary Hopi food intake patterns.* Ecology of Food and Nutrition (London), 6(3), 1977, 159-173. Engl. Refs.

Analysis of contemporary food intake patterns of the Hopi Indians (USA), ascertained by means of dietary recall on the part of 420 children and homemakers, revealed that the variety of traditional foods consumed has declined and been replaced in many cases by nutritionally inferior, commercially prepared foods. Young people are no longer learning how to produce and prepare traditional foods and this represents a disintegration of cultural identity, a loss of potential food sources for a hungry world, and a possible health hazard. Statistical data are included. (HC-L)

6782 **Lotter, V.** *Childhood autism in Africa.* Journal of Child Psychology and Psychiatry (London), 19(3), Jul 1978, 231-244. Engl. Refs.

Some 1 300 mentally handicapped children, mostly in institutions, were screened in order to test in developing countries the usefulness of Western criteria for recognition of childhood autism. Of the 30 symptomatic children, 9 were classified as autistic according to Western standards and their sex ratio, occurrence of epilepsy, and social background were comparable to Western groups. However, behavioural comparison with a British sample suggests that some prominent features of the syndrome, including ritual play and self-aggression, are uncommon in Africa. The implications of this study for the recognition and classification of autism are discussed. Statistical data are included. (DP-E)

6783 **Mabrouk, R.** *Ophtalmologie et médecine traditionelle en Chine aujourd'hui. (Ophthalmology and traditional medicine in China today).* Bulletin des Sociétés d'Ophtalmologie de France (Paris), 78(10), Oct 1978, 699-704. Fren.

Following a brief description of early medical books in the People's Republic of China, the author outlines the basic Chinese philosophy of health, illness, and physiology. Traditional medicine continues to play an important role in the treatment of diseases, particularly in the rural areas, and has been integrated with modern medical techniques. The author describes various types of herbal remedies, their preparation, and their use in treating illness. He also examines acupuncture and outlines its use in anaesthesia, the treatment of ocular diseases, and surgery to treat cataracts. (FM)

6784 **Olsson, B.** *Efficiency of traditional chewing sticks in oral hygiene programs among Ethiopian schoolchildren.* Community Dentistry and Oral Epidemiology (Copenhagen), 6(3), 1978, 105-109. Engl. 18 refs.

The effect of an oral hygiene programme was studied in 248 children from five school classes in Asella, Ethiopia. All the children were examined and given a professional tooth cleaning. Then two classes were instructed in the use of the toothbrush and the *mafeka* (traditional chewing stick), respectively; two classes received instruction and supervised daily brushing with the toothbrush and the *mafeka*, respectively; and one class acted as control. After 3 months, instruction only was found to have no effect on oral hygiene; instruction plus supervised brushing, however, had a significant effect and the *mafeka* was just as effective as the toothbrush in removing oral deposits. The *mafeka* is therefore recommended for use in oral health programmes, because it is familiar, readily available, and costs nothing. (Modified author abstract.)

6785 **Shaw, J., Hemming, M.P., Hobson, J.D., Nieman, P., Naismith, N.W.** *Comprehension of therapy by non-English speaking hospital patients.* Medical Journal of Australia (Sydney), 2(13), 24 Sep 1977, 423-427. Engl.

A survey of 1 832 outpatients at the Royal Melbourne Hospital (Australia) identified 280 patients who did not speak English as their native tongue. When 257 (90%) of these patents answered a pharmacist's questions (73 required an interpreter to do so), 65% demonstrated a good knowledge of drug dosages, frequency, and function. Of the remaining 90, 39 were uncertain of the correct dose, 38 could not state the function, and 13 knew neither the function nor the drug. In addition, only 78% were aware of the cautionary labels on medication containers. Because friends and family accompanying patients sometimes provided inaccurate or misleading translations, more trained interpreters should be available in the hospital. (DP-E)

6786 **Sow, A.M., Laurens, A., Fares, T., Giono-Barber, P., Sylla, O.** *Sur quelques plantes antidiabétiques de la pharmacopée africaine. (On some antidiabetic plants in African pharmacopoeia).* Médecine d'Afrique Noire (Paris), 26(12), Dec 1979, 951-955. Fren. 20 refs.

Several plants in the traditional African pharmacopoeia are reputed to have anti-diabetic properties and this has been confirmed experimentally in some cases. This paper discusses those plants whose active principles have already been isolated and those that are currently under study at the Faculty of Medicine, Dakar, Senegal. (HC-L)

6787 **Uyanga, J.** *Characteristics of patients of spiritual healing homes and traditional doctors in southeastern Nigeria.* Social Science and Medicine (Oxford, UK), 13A(3), 1979, 323-329. Engl.

This study examines the role of traditional and spiritual healers in southeastern Nigeria, the type of patients who visit particular healers, the factors that influence their choice, and the reasons for the popularity of these healers despite increasing urbanization and expansion of medical facilities in the area. The results reveal marked sexual, age, and socioeconomic differences between patients who patronize the two types of healers. Some of these healers specialize in illnesses that hospitals fail to cure, thus providing psychological satisfaction to their patients. Other findings provide information on the spatial and psychological aspects of planning health care delivery. Some statistical data are included. (Modified journal abstract)

V.7 Epidemiological, Family Planning, Maternal Child Health, Nutrition, and Disease Control Studies

See also: 6450, 6451, 6476, 6484, 6502, 6566, 6583, 6697, 6719, 6766, 6784

6788 **Abdalla, R.E., Sherif, H.** *Epidemic of cutaneous leishmaniasis in northern Sudan.* Annals of Tropical Medicine and Parasitology (London), 72(4), 1978, 349-352. Engl.

Although most Sudanese cases of cutaneous leishmaniasis were from the central region, in December 1976 there was a sudden and marked increase in the number of patients coming from the northern part of the country. Of 308 residents of two northern villages examined in a 1977 survey, 133 had skin lesions, of which 112 showed parasites in skin smears. The lesions were nodular or nodulo-ulcerative and all age groups were involved, a type of distribution that suggests that the disease was uncommon in the past. (DP-E)

6789 **Abreu, A., Wertheim, L.J., Ruiz de Zarate, S.** *Doce años de vacunación BCG y lepra infantil en Cuba. (Twelve years of BCG vaccination and leprosy in Cuban children).* Revista Cubana de Higiene y Epidemiología (Havana), 16, Jan-Apr 1978, 63-72. Span.

Data from 1965-1976 on leprosy in Cuban children aged 0-15 years were analyzed in order to shed light on the relationship between BCG vaccination and leprosy incidence. From 1965-1970 (no cases were reported from 1970-1976), 180 cases occurred and 133 (74%) of these were investigated. The following facts suggest, though by no means conclusively, that BCG vaccination has a prophylactic effect on leprosy: 45% of the afflicted had been vaccinated while 55% had not; and 24 cases of leprosy *lepromatosa* occurred in children who had not been vaccinated while only 4 occurred in children who had. The study is to continue through 1976-1980. (HC-L)

6790 **Ajjan, N.** *Vaccins contestés (variole, coqueluche, B.C.G., rougeole). (To immunize or not against smallpox, pertussis, measles and with BCG).* Pédiatre (Paris), 15(66), 1979, 49-83. Fren.

The author demonstrates the historical importance of vaccinations in controlling smallpox, whooping cough, tuberculosis, and measles and discusses the relative merits of the vaccines compared to the possible risks associated with their use. Smallpox, whooping cough, and measles vaccines can cause encephalitis and other neurological disorders. The rare complications that arise with BCG vaccinations are usually benign. In general, the protection against infectious diseases and the reduction in morbidity and mortality that have resulted from systematic vaccinations far outweigh the dangers of complications. (FM)

6791 **Alberti, A., Ciotti, F., Miano, A., Biasini, A., Contarini, L.** *Alimentazione di neonati di basso peso con un preparato ad alto contenuto proteico; studio auxologico e metabolico a breve termine. (Feeding low-birth-weight infants a preparation with a high protein content; short-term studies of growth and metabolism).* Minerva Pediatrica (Turin, Italy), 30(19), 15 Oct 1978, 1549-1554. Ital.

A commercial milk containing protein 30.6 g:100 Kcal, 40% of it from casein and 60% from albumin and with an amino acid pattern resembling that of human milk, carbohydrate entirely from lactose, and lipid of which 92% was of vegetable origin was given to 25 healthy Italian low-birth-weight infants. The milk's vitamin and mineral contents are also described. In the 1st and 2nd weeks, after the maximum physiological weight loss, gain in body weight and increase in length and head circumference were considered similar to that of breast-fed low-birth-weight babies. From protein and urea in blood, specific gravity of urine, and acid-base balance, it was concluded that the milk was well-tolerated. Statistical data are included. (Modified journal abstract)

6792 Alemi, A.A., Shafii, F., Kamali, P. *Health status of a rural Iranian community in the Caspian littoral area in 1976.* Iranian Journal of Public Health (Teheran), 7(2), Summer 1978, 83-93. Engl.

The health status of a rural Iranian community is measured in terms of literacy and educational attainment, living conditions, vital statistics, and fertility. The findings reveal that, among other unhealthy conditions, some 80% of the population is infected by one or more parasitic diseases and there is an infant mortality of 98.4:1 000. It is recommended that more resources be allocated to raise the standard of living and improve environmental sanitation, make primary care services more accessible, and train more health auxiliaries. Tables of statistical data are appended. (DP-E)

6793 Almeida, W., Celeste, A., Lima, N.S. *Experiência de audiometria como rotina de exame médico em escolares. (Experimental inclusion of audiometry as part of the regular medical examination of schoolchildren).* Jornal de Pediatria (Rio de Janeiro, Brazil), 44(2), Feb 1978, 108-109. Portuguese.

Over an 18-month period, 4 028 Brazilian schoolchildren were screened for aural deficiency by means of simple audiometric testing. Ninety-nine (2.4%) were found to exhibit some degree of impaired hearing; this was confirmed in 93% of the 29 (29.2%) children who presented for examination by a specialist (their diagnoses are listed). The study demonstrates the reliability of audiometric testing and recommends that it be conducted as a routine procedure in the schools. The rather low response rate (29.2%) to follow-up examination indicates poor understanding on the part of parents of the importance of such preventive activities. (HC-L)

6794 Almroth, S., Latham, M.C. *Breast feeding practices in a rural area in Jamaica.* Naringsforskning (Gotebord, Sweden), 21(4), 1977, 299. Engl.

Interviews with 180 mothers in northeastern Jamaica revealed that a combination of breast- and bottle-feeding was the method of infant feeding that predominated for children aged 1-9 months, that the median weaning age was 9 months, and that the introduction of liquid foods was begun extremely early. Indeed, 50% of all infants were receiving supplementary milk by age 1 month and nearly 100% by age 4 months, despite the prohibitive cost of infant formula. Nutritional status of breast- and bottle-fed babies declined with age but predominantly breast-fed babies were better off than predominantely bottle-fed babies. (HC-L)

6795 Anderson, J., Fuglsang, H., Marshall, T.F., Radolowicz, A., Vaughan, J.P. *Studies on onchocerciasis in the United Cameroon Republic; IV: a four-year follow-up of six rain-forest and six savanna villages; the incidence of ocular lesions.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 72(5), 1978, 513-515. Engl.

After an interval of 4 years, the same examiners surveyed six rain forest and six savanna villages using the same standardized techniques for assessing the prevalence of onchocerciasis. This paper analyzes the incidence of ocular changes by village. In the rain forest, the concentrations of microfilaria in the skin were similar in the six villages. In the savanna, the corresponding quantities were much higher in the three more heavily infected villages compared with the three less heavily infected ones. The implications of these findings for the control of blindness due to onchocerciasis in the savanna are discussed. Statistical data are included. (Modified journal abstract)

6796 André, L.J., Gandolfi, R. *Leishmaniose cutanée en Arabie saoudite. (Cutaneous leishmaniasis in Saudi Arabia).* Médecine Tropicale (Marseilles, France), 38(4), Jul-Aug 1978, 411-412. Fren.

In 1976, 15 cases of cutaneous leishmaniasis were observed in personnel of a company operating in Tabuk in northern Saudi Arabia. All patients were adults who had been stationed in Tabuk for more than 6 months. The lesions were multiple in 12 cases and were situated on the face and uncovered parts of the body. In one case there were 10 lesions. Other observers have noted cases occurring in June, July, and August. As no infected dogs were seen, it was concluded that the vectors were the wild rodents living in numerous burrows near the refuse dump. The authors recommend that measures be undertaken to improve hygiene and waste disposal. (Modified journal abstract)

6797 Ardouin, C., Carteron, B., Morvan, D., Gendreau, Y. *Découverte d'un foyer de bilharziose à* Schistosoma haematobium *en République de Djibouti. (Discovery of a focus of* Schistosoma haematobium *infection in the Republic of Dji-*

bouti). Bordeaux Médical (Bordeaux, France), 11(2), 1978, 2705-2708, 2710-2712. Fren.

In 1975, an outbreak of schistosomiasis was detected in a small village in Djibouti, a country which had previously been free of the disease. A total of 23 of the 233 villagers were diagnosed and treated before the transmission of the disease was brought under control. Clinical examination showed few symptoms of the disease at the initial stage, during which only the urinary symptoms are important. Serological examination carried out in specialized laboratories appears to be the only sure diagnostic tool available for any important epidemiological investigation. The prophylactic measures implemented have resulted in the elimination of this focus, but its eventual reappearance is very probable. Statistical data are included. (Modified journal abstract)

6798 **Argellies, J.L.** *Incidence de la maladie de Hansen en Martinique; analyse épidémiologique critique des modes de dépistage. (Incidence of leprosy in Martinique; epidemiological analysis of detection methods).* Bordeaux Médical (Bordeaux, France), 11(3), 1978, 2775-2786. Fren.

Basing his findings on epidemiological statistics on leprosy in Martinique, the author analyzes and evaluates case-finding and detection methods. He demonstrates that clinical examinations of schoolchildren reveal only 25% of potential leprosy cases. To improve this rate, slightly higher age groups, which are more likely to have a higher number of cases, should be selected. By calculating the proportion of new cases among children who were actually examined, it is possible to estimate the number of probable cases in the population as a whole. Statistical data are included. (FM)

6799 **Ashcroft, M.T.** *Review of epidemiological research in a rural Jamaican community, 1959-1975.* West Indian Medical Journal (Kingston), 28(1), 1979, 3-16. Engl. Refs.

Epidemiological research carried out from 1959-1976 in a rural community in Jamaica is summarized. The prevalence of many chronic conditions was established by cross-sectional investigations. The importance of hypertension and diabetes mellitus as a cause of mortality was demonstrated in follow-up studies. Factors influencing child growth and school achievement were also investigated. Statistical data are included. (Modified journal abstract)

6800 **Avalos Triana, O.** *Influencia de la edad de la madre en los niveles de mortalidad perinatal. (Influence of maternal age on perinatal mortality).* Revista Cubana de Administración de Salud (Havana), 5(2), Apr-Jun 1979, 133-141. Span.

Comparison of data from an investigation into perinatal mortality in eight countries (Austria, Cuba, USA, Hungary, England and Wales, Japan, New Zealand, and Switzerland) and a similar investigation in Cuba (1973) revealed that: in all countries, perinatal mortality was highest among mothers aged less than 20 years and more than 40 years; perinatal mortality was lowest in the age groups 20-24 and 25-29 years, depending on the country; and, compared to the other countries, Cuba had the highest proportion of births in the under-20 and over-40 brackets and the lowest in the age group 20-29 years. (HC-L)

6801 **Ayeni, O., Oduntan, S.O.** *Effects of sex, birthweight, birth order and maternal age on infant mortality in a Nigerian community.* Annals of Human Biology (London), 5(4), 1978, 353-358. Engl. Refs.

Infant mortality data for the period 1971-1975 in a rural Nigerian town were reviewed in order to determine the influence of variables such as sex of baby, birth weight, birth order, and maternal age on infant survival. The study revealed that infant mortality was not significantly associated with sex, was 5.9 times higher among low-birth-weight babies, increased consistently with order of birth, and was highest for mothers younger than 20 and older than 35 years. Study findings are tabulated and discussed. (HC-L)

6802 **Bajoghli, M., Naficy, A.R., Vafai, A., Shafa, G.** *Paralytic poliomyelitis in Isfahan.* Journal of Tropical Pediatrics and Environmental Child Health (London), 23(5), Oct 1977, 236-238. Engl. 14 refs.

In virological studies of 14 cases of paralytic poliomyelitis among children in Isfahan (Iran), poliomyelitis virus type 1 was isolated in 10 cases. Viruses were recovered mostly within the 1st 2 weeks of paralysis. Four cases had positive throat and rectal swabs. Five of the patients had been partially immunized and in the other nine there was no history of poliomyelitis vaccination. The ever increasing importance of prevention of poliomyelitis in rapidly developing countries with concentrated efforts to assure continuing vaccination of infants and young children is emphasized. (DP-E)

6803 **Ballesteros M., S., Teuber B., A.M., Stuardo M., O., Villarroel H., H.** *Estudio comparativo étnico-ambiental sobre frecuencia de caries dentaria en una población escolar del sur de Chile. (Comparative environmental-ethnic study of the incidence of dental caries in a school population in southern Chile).* Odontología Chilena (Santiago), 25(118), Nov 1977, 98-101. Span. 27 refs.

A study of dental caries in 710 adolescents of various ethnic but similar socioeconomic backgrounds was undertaken in the city of Puerto Varas, Chile. The average number of dental caries per child was found to be highest among Caucasian children and lowest among Amerindians, with children of mixed race in between. The average number of caries increased with age and was higher among girls than boys. These results support the findings of previous studies, indicating a genetic component in the aetiology of the disease. Statistical data are included. (HC-L)

6804 **Banik, N.D.** *Study of incidence of different birth-weight babies and related factors.* Indian Pediatrics (Calcutta, India), 15(4), Apr 1978, 327-334. Engl. 20 refs.

From 1962-1970, anthropometric measurements of Indian infants within 48 hours of birth identified 86 boys and 76 girls (5.5%) who were considered low-birth-weight (less than 2 000 g), while 8.8% weighed more than 3 501 g. Statistical data are presented on the socioeconomic status of the infants' families, maternal age and parity, and various anthropometric measurements. (DP-E)

6805 **Baquir, H.** *Epidemiology of schistosomiasis in Iraq in 1973 and 1974 with special reference to schistosomiasis population studies.* Bulletin of Endemic Diseases (Baghdad), 18(1-4), Nov 1977, 51-62. Engl.

Statistical data on the epidemiology of schistosomiasis among schoolchildren and other Iraqi population sectors in 1973-1974 are presented and discussed. Analysis of these data indicates an apparent decline in the prevalence of the disease and in the percentage of snail-infected water bodies as well as a slower spread of schistosomiasis in most provinces. In 1974 there were an estimated 566 million cases of schistosomiasis in Iraq compared to 480 million in 1973. (DP-E)

6806 **Basa, G.F., Hirayama, T., Cruz-Basa, A.G.** *Cancer epidemiology in the Philippines.* National Cancer Institute Monographs (Bethesda, Md.), 47, 1977, 45-56. Engl. 9 refs.
Symposium on Epidemiology and Cancer Registries in the Pacific Basin, Maui, Hawaii, 11-14 Nov 1975.

The results of an epidemiological study based on 16 492 cancer cases recorded at the Central Tumor Registry of the Philippines from July 1968-June 1973 are discussed and presented as statistical data. Age-adjusted incidence rates for cancer of all sites in the Philippines, the USA, and Japan were similar. Among smokers, neoplasms of the lung, larynx, mouth, liver, esophagus, and oropharynx occurred with significantly higher frequency. Epidemiological implications and the importance of these results for cancer control are examined. (DP-E)

6807 **Belizán, J.M., Villar, J., Belizán, M.Z., Garrote, N.** *Asistencia de embarazadas a la consulta prenatal en maternidades públicas de Rosario, Argentina. (Prenatal attendance at public maternity hospitals in Rosario, Argentina).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 86(2), Feb 1979, 121-130. Span. 9 refs.

A survey of 689 women delivered in three public maternity clinics in the city of Rosario, Argentina, was carried out in 1976 to collect information on prenatal attendance, pregnancy outcome, socioeconomic background, motives for not attending, and impressions of treatment received. Poor prenatal attendance (fewer than four encounters) tended to be: associated with high fetal loss (23.9%), neonatal depression (4.4%), and low birth weight (14%); characteristic of mothers from the lowest socioeconomic background and highest parity; and motivated by ignorance of the importance of prenatal care. Dissatisfaction with care received focused on treatment by facility staff and administrative procedures. Efforts aimed at public education and improved staff/client relations are called for. Statistical data are included. (HC-L)

6808 **Bertrand, A.** *Vaccinations et le contrôle des maladies infectieuses. (Vaccinations and the control of infectious diseases).* Médecine et Maladies Infectieuses (Paris), 8, 1978, 532-586. Fren. Refs.

This journal issue presents a number of articles on the medical, epidemiological, legal, and administrative aspects of vaccinations and vaccination programmes. The history of the development of vaccines and vaccination methods is followed by a discussion of the role of immunization in controlling infectious diseases. Other articles describe the effectiveness of recent poliomyelitis, measles, smallpox, and rubella vaccination programmes. In the case of the control of enteric diseases, it is concluded that personal hygiene and sanitation are more effective than existing vaccines. Side effects and risks associated with vaccines are also summarized. Many articles contain statistical data. (FM)

6809 **Blanc, M.** *Evaluation de la campagne de masse contre la lèpre en Haute-Volta après dix ans d'activité (1966-1976). (Evaluation of the leprosy mass screening campaign in Upper Volta after 10 years of activities, 1966-1976).* Acta Leprologica (Geneva), 73, Oct-Dec 1978, 39-58. Fren. 14 refs.

A survey taken to evaluate the effectiveness of the leprosy control programme in Upper Volta shows that the incidence of the disease had diminished by 84.98% during the past 10 years and is now only 5.26%. There are, however, some 30 000 people still suffering from leprosy and greater effort must be made to locate and treat these cases. The possibility of biological resistance to treatment must also be studied so that corrective measures can be taken. More funds for research must be made available and the staff participating in the campaign should be upgraded. (FM)

6810 **Bloch, M., Rivera G., H.** *Hookworm disease; the magnitude of the problem and the reason why we ignore it.* Revista del Instituto de

Investigaciones Médicas (San Salvador), 6(2), Apr-Jun 1977, 131-142. Engl.

The geographical distribution of hookworm infection in Latin America is examined and its epidemiology from 1920-1940 is described. After this time, the authors claim that the disease was largely ignored by both clinicians and pathologists, supposedly because they failed to diagnose it properly in both live patients and autopsies. The authors maintain that hookworm is still a major health problem; analyze the situation in Venezuela, Brazil, Costa Rica, Honduras, Puerto Rico, Jamaica, Santo Domingo, Colombia, Ecuador, and Paraguay; and stress the need for proper epidemiological studies. (DP-E)

6811 **Bobin, P., Barabe, P., Bordahandy, R., Calzolari, M., Dedet, J.P.** *Leishmaniose cutanée en Algérie. (Cutaneous leishmaniosis in Algeria).* Médecine Tropicale (Marseilles, France), 38(4), Jul-Aug 1978, 419-424. Fren. 14 refs.

The authors report on 27 cases of cutaneous leishmaniasis among Algerian males aged 20-30 years that were studied in 1975 and 1976. They include epidemiolocial, clinical, and immunological information, as well as remarks on treatment methods. Treatment with glucantime (antimony) was given, 1 injection a day for 12 days, and all patients treated with this regimen healed. Metronidazole was used in 11 cases, but, although well-tolerated, it was not constant in its effect and acted less rapidly than antimony. Statistical data are included. (Modified journal abstract)

6812 **Borazjani, G., Javey, H., Sadjadi, H.E., Daneshbod, K.** *Maternal mortality in South Iran: a seven-year study.* International Journal of Gynaecology and Obstetrics (Baltimore, Md.), 16(1), 1978, 65-69. Engl. 10 refs.

A survey of Iranian women hospitalized from 1970-1976 revealed a maternal mortality of 248.7:100 000 live births, which was significantly lower than the rate for 1963-1969 (391 8:100 000). However, the overall distribution of diseases leading to death remained unchanged. The causes of death were classified as direct obstetric in 60.4% of the cases, indirect obstetric in 13.5%, and unrelated to obstetric events in 26.0%. Infection was the leading cause of death in all categories. Among the direct obstetric causes, haemorrhage, pulmonary embolism, and eclampsia were the major causes of death. About 76% of the patients were from rural areas and 24% from urban areas; none had received any antenatal care. (Modified journal abstract)

6813 **Brink, E.W., Perera, W.D., Broske, S.P., Cash, R.A., Smith, J.L.** *Vitamin A status of children in Sri Lanka.* American Journal of Clinical Nutrition (Bethesda, Md.), 32(1), Jan 1979, 84-91. Engl. 15 refs.

A country-wide nutrition survey of children aged 6-71 months revealed that vitamin A deficiency may be an important public health problem in two of Sri Lanka's 15 health areas. Further study in the two areas revealed that a high prevalence of clinical eye conditions and low mean serum vitamin A values were found in the group of chronically undernourished children—those who were less than 90% of their expected height-for-age. This paper describes the survey materials and methods, including the training of the auxiliary field staff who collected the data. The study results led to the redirection of vitamin A capsules to children with the highest prevalence of ophthalmological signs and symptoms of vitamin A deficiency and/or the highest prevalence of chronic undernourishment. Statistical data are included. (HC-L)

6814 **Brohult, J., Jorfeldt, L., Rombo, L., Björkman, A., Pehrson, P.O.** *Working capacity of Liberian males: a comparison between urban and rural populations in relation to malaria.* Annals of Tropical Medicine and Parasitology (London), 75(5), 1981, 487-494. Engl. 14 refs.

Bicycle ergometry was used to assess the influence of malaria on working capacity by comparing the performance of 39 adult Liberian men from a holoendemic area with that of 99 men from a mesoendemic area, the performance of subjects with positive and negative smears within each area, and the relationship between work performance and total haemoglobin. The results suggest that physical performance is not influenced by malaria, since the working capacity was not lower either in the holoendemic group or in subjects with positive malaria smears. This paper presents and discusses the study findings. (HC-L)

6815 **Brown, H.B., Heidgerken, J., Jacobsen, M.** *Malnutrition in the mountains of northern Haiti.* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(4), Aug 1978, 176-181. Engl. 17 refs.

In a study of malnutrition in the mountainous area of northern Haiti near the town of Grande Rivière, 857 children aged less than 6 years were weighed, 406 were examined for the clinical signs of malnutrition, and data concerning their family size, socioeconomic status, etc., were gathered. It was found that 13% were severely malnourished by the Gómez classification: 0.72% had kwashiorkor, 0.72% had marasmus, and 11.3% suffered from vitamin A deficiency. The incidence of malnutrition increased with age up to 6 years and correlated positively with lack of a steady income, absence of father in the home, and family size. The results, when compared with earlier studies conducted in the same area, indicate that 18 years of superficial and technical solutions have had minimal success in improving the situation. Five tables of data are presented and the ecology of the problem of malnutrition in Haiti is briefly discussed. (HC-L)

6816 **Brown, J.E., Brown, R.C.** *Evaluation of nutrition centre effectiveness by measurement of younger siblings.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 73(1), 1979, 70-73. Engl.

In a nutrition study in Bulape, Zaire, the nutritional status of 30 children aged 8-24 months was evaluated by means of anthropometric measurements at the time of their admission to the village nutrition centre. Their younger siblings were later measured at the same age. Comparisons of these results with the measurements of the younger siblings of a matched control group showed the same growth patterns, indicating that centre teaching had apparently not affected the way mothers fed their younger children or the children's growth. Statistical data are included. (DP-E)

6817 **Browne, M.S., Nomani, M.Z.** *Nutritional assessment of Virgin Islands school children.* Journal of the American Dietetic Association (Baltimore, Md.), 73(4), Oct 1978, 411-415. Engl. 19 refs.

A group of 427 schoolchildfen on St. Thomas, Virgin Islands, was studied to obtain baseline data on some anthropometric measures, biochemical values, food habits, and educational parameters. Average grade performance and attendance records were also obtained for 268 students in the sample. Nine percent of the sample appeared overweight and a correlation between poor academic performance and low food intake was observed. Study data are set forward in six tables and discussed. (HC-L)

6818 **Cabrera, B.D., Valezaa, F., Santos, A.T., Cruz, I.** *Current status of schistosomiasis japonica in Sorsogon province, Republic of the Philippines.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 9(1), Mar 1978, 86-92. Engl.

A resurvey of Irosin (the Philippines) and eight surrounding municipalities for schistosomiasis japonica using COPT and FECT was carried out to determine the status of the disease 30 years after it was first reported in 1947. In Irosin, the FECT results showed a decrease in prevalence from 5.7%-2.8%, while COPT revealed an increase from 5.7%-12.2%. The disease, as well as the snail host, had undoubtedly spread into the surrounding areas. Statistical data are included. (Modified journal abstract)

6819 **Campos Junior, D., Sbroggio, M.A., Duarte Miglioli, A.M., Esteves Hernandes, M., Rahabani Elias, M.** *Evolução de prática do aleitamento materno em pequena comunidad de hábitos rurais—estudo retrospectivo. (Practice of breast-feeding in a small rural community—a retrospective study).* Jornal de Pediatria (Rio de Janeiro, Brazil), 45(5), Nov 1978, 333-341. Portuguese. 12 refs.

A longitudinal survey of infant feeding practices in a small rural community in Brazil revealed that the average duration of breast-feeding declined from 11 months to 1.8 months over a period of 20 years and that this decline paralleled increased utilization of medical services. It is suggested that the "medicalization" of pregnancy may be responsible for lactation failure and recommended that steps be taken to reinstate gestation as a natural phenomenon, independent of time-tables, technique, supplementation, and other scientific trappings. Statistical data are included. (HC-L)

6820 **Canese, A.** *Datos actualizados sobre conocimientos epidemiológicos de la enfermedad de Chagas en el Paraguay. (Current epidemiological data on Chagas' disease in Paraguay).* Revista Paraguaya de Microbiología (Asunción), 13(1), 1978, 7-19. Span. 36 refs.

This article reviews current knowledge about Chagas' disease (trypanosomiasis) in Paraguay. The known geographical distribution of the vector is tabulated and mapped. Studies of mammalian reservoirs are rare, but the opposum and the dog are identified as hosts. Clinical and serological evidence indicates that the disease exists throughout the country but, due to practical difficulties, precise information is not available. Copious statistical data are included. (Modified journal abstract)

6821 **Cartwright, J.D.** *BCG vaccination of the newborn.* South African Medical Journal (Cape Town), 54(2), 8 Jul 1978, 65-67. Engl. 11 refs.

From October 1971-December 1976, some 14 000 full-term black infants born at a hospital in the Transvaal (South Africa) were given one of three types of BCG vaccinations on the 1st and 2nd day of life. Of 538 infants admitted for tuberculosis during the same period, only 19 had been vaccinated, none of whom had serious forms of the disease. Tuberculosis in vaccinated infants should be carefully investigated to determine age at vaccination, type of vaccine, degree of exposure, and socioeconomic factors that may have contributed to vaccine failure. Properly administered, BCG vaccination should give 60%-80% protection to neonates for approximately 5 years. Statistical data are included. (DP-E)

6822 **Chandra, P., Harilal, K.T.** *Factors affecting efficacy of B.C.G. vaccination.* Indian Pediatrics (Calcutta, India), 14(7), Jul 1977, 535-538. Engl.

In 1975, 285 children who had received BCG vaccinations and 425 who had not were registered in a Madras (India) tuberculosis clinic. Of these children, 40% were malnourished and 35%-40% were or had been suffering from measles, whooping cough, or gastroenteritis. About half of the BCG group showed some symptoms of tuberculosis, usually minor, while 68% of the non-immunized group had definite clinical signs, many of them serious. While BCG vaccinations do offer some protection against tuberculosis, it is noted that malnutrition, debilitating diseases, and lack of sanitation can interfere with their effectiveness. Statistical data are included. (DP-E)

6823 **Chaturvedi, U.C., Mathur, A., Singh, U.K., Kushwaha, M.R., Mehrotra, R.M.** *Problem of paralytic poliomyelitis in the urban and rural population around Lucknow, India.* Journal of Hygiene (Cambridge, UK), 81(2), 1978, 179-187. Engl. Refs.

A house-to-house survey of 103 108 persons in Lucknow (India) in the rural area of Unnao revealed a total of 203 cases of paralysis, of which 34 were not clinically characteristic of poliomyelitis. The 169 poliomyelitis cases gave an incidence of 2 and 1.26:1 000 in the urban and rural populations, respectively. Polio vaccine had not been used at all in the rural area and 67 of the 80 families were ignorant of its existence. In Lucknow, only 3 families had used polio vaccine and only one child had had a full 3-dose course. Statistical data are included. (Modified journal abstract)

6824 **Chen, L.C.** *Control of diarrheal disease morbidity and mortality: some strategic issues.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(12), Dec 1978, 2284-2291. Engl. 15 refs.

Basing his findings on studies done at the Cholera Research Laboratory in Bangladesh, the author examines diarrheal morbidity and mortality patterns. Diarrheal disease accounts for up to 50% of all childhood diseases and is one of the main causes of death. Comparison of annual diarrhea incidence by age in rural and urban Bangladesh shows a higher rate in rural areas and among children. Data is also presented on the contribution of diarrheal diseases to overall mortality. After discussing the relationship between nutrition and diarrhea, the author concludes by comparing the effectiveness of various methods to reduce both morbidity and mortality. (FM)

6825 **Chen, S.T.** *Standards for subcutaneous fat and arm circumference in Malaysian school children.* Journal of the Singapore Paediatric Society (Singapore), 19(2), Jun 1977, 97-100. Engl.

Standards for subcutaneous fat and arm circumference in Malaysian schoolchildren were obtained by a longitudinal study of 686 children followed from age 6-12 years. Children from the higher income group had more fat and bigger arm circumferences than those from the lower income group. Chinese children had significantly more fat and bigger arm circumferences than Indian children. In both boys and girls, the average triceps skinfold and arm circumference values approximated those of Singapore children but were lower than those of children in the UK and the USA. Statistical data are included. (Modified journal abstract)

6826 **Correa, H., Jacoby, J.** *Nutrition and fertility: some iconoclastic results.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(8), Aug 1978, 1431-1436. Engl. 18 refs.

In this paper, the evidence available is used to conclude that, as levels of nutrition increase from insufficient to excessive, fertility increases and then decreases. This suggests that the relationship between fertility and nutrition has the shape of an inverted U. Next, the hypothesis is explicitly tested using countries as units of observation. In the statistical analysis, the possibility of spurious relationships is carefully controlled. The results strongly support the hypothesis that, for existing levels, additional intake of nutrients decreases the level of fertility. (Modified journal abstract)

6827 **Courtois, C.M., Gebert, F.** *Recent observations on schistosomiasis in Mauritius.* Tropical and Geographical Medicine (Haarlem, Netherlands), 31(3), Sep 1979, 381-387. Engl. Refs.

A study of schistosomiasis was carried out in Mauritius from 1967-1975. This paper describes the distribution and infection rates of the snail intermediate host and its role in human infection. Distribution patterns show an increase in the number of snail sites, although they remain clustered in northwestern and southeastern low-lying areas. The snail's resistance to adverse conditions makes it hard to control. Infection rates varied from year to year and from one locality to the next, with a high of 10% being recorded at a single site. Since no schistosomiasis survey has been done in Mauritius, little information is available on human infection. Of the 440 children and adolescents examined during this study, the authors found an overall prevalence rate of 15%. (FM)

6828 **Cox, J.L.** *Psychiatric morbidity and pregnancy: a controlled study of 263 semi-rural Ugandan women.* British Journal of Psychiatry (London), 134, 1979, 401-405. Engl. Refs.

A semi-structured psychiatric questionnaire was used to interview 263 pregnant and 89 non-pregnant, non-puerperal tribal Ugandan women. Comparison of psychiatric morbitity between the two groups showed an increased frequency of psychiatric morbidity among pregnant women. Separated pregnant women were particularly at risk. No association was found between antenatal psychatric morbidity and age, gravidity, number of co-wives, or the duration of the pregnancy. Statistical data are included. (Modified journal abstract)

6829 **Córdova Vargas, L., Amador, M.** *Prevención y erradicación de la mala nutrición en Cuba. (Prevention and eradication of malnutrition in Cuba).* Revista Cubana de Pediatría (Havana), 50(2), Mar-Apr 1978, 171-183. Span. 42 refs.

Examination of a number of direct and indirect indicators of nutrition status—infant and child mortality, mortality due to conditions in which malnutrition plays a part (e.g., diarrheas), deficiency diseases, anthropometric measurements, etc.—shows that malnutrition has all but disappeared in Cuba. This paper examines some of the factors responsible for this remarkable achievement. These include universal medical care, health education, mass involvement in preventive programmes, increased food production, and, in general, a more equitable socioeconomic order. (HC-L)

6830 **Cross, J.H., Wheeling, C., Banzón, T., Basaca-Sevilla, V., Sevilla, J.** *Amoebiasis and intestinal parasitic infections in a population on Cebu Island, the Philippines.* Annals of Tropical Medicine and Parasitology (London), 71(4), 1977, 435-441. Engl. 9 refs.

A serological and a stool survey carried out on more than 1 000 Filipinos from Cebu Island confirmed that amoebiasis was endemic, although not epidemic, in the area and due mainly to substandard sanitary conditions. The most common parasites found were *Trichuris trichuria* (53%), *Ascaris lumbricoides* (50%), and hookworm (22%). The survey methodology is described and statistical data are included. (DP-E)

6831 **Crosskey, R.W.** WHO, Geneva. *Appraisal of current knowledge of* Simulium damnosum *S.L. in the Federal Republic of Nigeria in relation to the development of an onchocerciasis control campaign.* Geneva, WHO, 1979. 37p. Engl.

This WHO report traces the history of onchocerciasis control and research in Nigeria and identifies the vectors. It also presents data on geographical distribution both inside and outside the country, on seasonal distribution and abundance, and on *Onchocerca volvulus* in the vectors. Annexes list vector breeding sites and locations. Maps and statistical data are included. (DP-E)

6832 **Cunningham, N.** *Under fives clinic; what difference does it make?* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(6), Dec 1978, 239-334. Engl. Refs.

This 1966-1967 in-depth survey evaluates the impact of an under-fives clinic on the health of village children in Imesi Ile, Nigeria. Separate chapters treat materials and methods, population data, child health data, environmental factors, the clinic itself, the clinic's achievements, and a number of other factors such as personnel, costs, and components of care. Statistical data are included in 107 tables and appendices contain guidelines and lists of personnel and equipment. The results indicate that the clinic was instrumental in improving child health in Imesi. (DP-E)

6833 **Dajani, Y.E.** *Prevalence of hydatid disease in Syria and Jordan: preliminary results.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 72(3), 1978, 320-321. Engl.

Hydatid disease is endemic in Syria and Jordan; both physicians and veterinarians recognize it as an important health problem. From January-August 1977, 110 of 3 149 animals examined in Amman central abbatoirs had hydatid cysts in the liver: an overall incidence of 3.5%, with an infection rate of 4.5% in sheep, 2.3% in goats, and 5.2% in cattle. During the same period, 26 cases of hydatid disease were admitted to the Amman University Hospital (a rate of 2.7: 1 000 admissions). The author stresses the need for further research. (Modified journal abstract)

6834 **Dar, F.K., Taguri, S.** *Human hydatid disease in eastern Libya.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 72(3), 1978, 313-314. Engl.

In Libya, with its large population of sheep, goats, cattle, and camels, some 700 000 rural and urban people are considered to be at risk of infection with hydatid disease. A retrospective study of 180 surgically confirmed cases from 1971-1976 revealed that 53.9% occurred in males and 46.1% in females. The organs most commonly involved were the liver (53.3%), lungs (30.6%), and abdomen (7.8%) with 1 fatal (heart) case and 1 cerebral cyst. Only 2.8% of patients showed multiple organ involvement. The authors discuss the possibility of wind-borne infection and stress the need for further study. (Modified journal abstract)

6835 **Davies, J.B., Le Berre, R., Walshi, J.F., Cliff, B.** *Onchocerciasis and* simulium *control in the Volta River Basin.* Mosquito News (Fresno, Cal.), 38(4), Dec 1978, 466-472. Engl. 9 refs.

The WHO Onchocerciasis Control Programme in the Volta River Basin of West Africa aims at reducing transmission of the disease by attacking the larval stage of the vector at its breeding sites in the river. Up to 14 000 km of river water are treated with temephos by air. The effect of the applications is monitored on the ground by inspection of the rivers for aquatic stages of *Simulium damnosum* and by assessing biting rates of black flies. After the 1st year, transmission rates in the centre of the area are deemed satisfactory, but on the perimeters dangerous transmission continues, possibly because of flies invading the area from south and west. (Modified journal abstract)

6836 **Devadas, J.P., Chandrasekhar, U., Anandi, G.** *Dissemination of nutrition information through parent teacher associations in two different primary schools.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 16(2), Feb 1979, 44-48. Engl.

Evaluation of a 5-month nutrition education programme for the mothers of 50 schoolchildren in Coimbatore (India) revealed an improvement in the mothers' knowledge and practices and in the children's growth. The programme consisted of weekly nutrition talks and demonstrations sponsored by two Parent Teacher Associations. The results are discussed and presented as statistical data. The authors also examine dietary practices, frequency of use of different foods, cooking practices, etc., before and after the programme. (DP-E)

6837 **Diallo, S., Sarr, M., Victorius, A., Diongue, S., Badji, B.** *Transmission de* Wuchereria bancrofti *en zone littorale sahelo-souadienne (petite côte du Sénégal). (Transmission of* Wuchereria bancrofti *in the Sahelo-Sudanese coastal zone).* Société Médicale d'Afrique Noire de Langue Française (Dakar), 23(2), 1978, 128-140. Fren. 18 refs.

Lymphatic filariasis affects 39.5% of the adult population in the village of Nianning on the coast of Senegal. From July 1975-October 1976, mosquitoes from the area were systematically captured, classified, and examined for microfilaria. Only one species, *Anopheles gambiae*, was found to be infected and it is only prevalent between the months of July and November. It is therefore concluded that a seasonal transmission is not incompatible with the existence of a strong filariasis endemicity. Details of the study materials, methods, and findings and statistical data are included. (HC-L)

6838 **Diop, B., Sow, A.M., Dioh, H., Sankale, M.** *Evolution de la morbidité due aux salmonelloses dans le service de clinique médicale du C.H.U. de Dakar. (Salmonellosis morbidity in Dakar Hospital medical clinic).* Médecine d'Afrique Noire (Paris), 25(8-9), Aug-Sep 1978, 491-500. Fren. 18 refs.

The authors compare the findings of a study of 38 typhoid fever cases, observed at a Dakar (Senegal) clinic from January 1973-December 1977, with the findings of a previous 10-year study. Distribution by age, sex, ethnic origin, and geographical location is outlined and the stability of the disease in recent years is noted. Annual cases have diminished from 36-8. Clinical and biological information on incubation and progression of the disease is given. Mortality due to typhoid fever has risen from 9%-13%, probably because of late hospitalization and more serious cases. Contrary to findings of the previous study, the disease now seems to affect both sexes equally. Statistical data are included. (FM)

6839 **Dobbins, J.G.** *Life expectancy in an Aboriginal Malaysian population.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 10(1), Mar 1979, 106-114. Engl. Refs.

A life table for an Aboriginal Malaysian population, the Semelai, was constructed using census data from 1965, 1969, and 1974 and interview data from 1974. The life expectancy at birth for this population, 54.0 years, was compared to that of other Malaysian populations and selected Asian populations. This comparison indicated that the Semelai were at a disadvantage when compared to the former and at an advantage when compared to the latter. Statistical data are included. (DP-E)

6840 **Dutertre, J., Nepote Vesino, R.** *Mortalité infantile dans un village rural ivoirien. (Child mortality in a rural Ivory Coast village).* Médecine Tropicale (Marseilles, France), 38(1), Jan-Feb 1978, 95-97. Fren.

The purpose of this paper is to show that perinatal, infant, and child death rates in rural African villages are not as high as reports have indicated. In a rural Ivory Coast village of 6 000, all births and stillbirths were recorded by the local missionary hospital over a 10-year period; at the same time, civil authorities kept track of deaths. Statistical analysis yielded a perinatal mortality of 48.6:1 000 and an infant death rate of 63:1 000. Statistical data are included. (Modified journal abstract)

6841 **Dutta, H.M., Dutt, A.K., Vishnukumari, G.** *Resurgence of malaria in Tamilnadu.* Social Science and Medicine (Oxford, UK), 13D(3), Nov 1979, 191-194. Engl.

By 1965, India's anti-malarial programme had been so effective that there were no deaths from malaria in that year and disease control efforts were relaxed. The author traces the resurgence of malaria in Tamilnadu as the disease diffused extensively throughout the state from 1969-1976. Because of the enormous expense of mounting an effective disease control programme in an endemic area, the author stresses the need to develop an anti-malarial vaccine. (DP-E)

6842 **Ekambaram, V., Sithambaram, M.** *Self-healing in non-lepromatous leprosy in the area of the ELEP Leprosy Control Project, Dharmapuri (Tamil Nadu).* Leprosy in India (New Delhi), 49(3), Jul 1977, 387-392. Engl.

This study assessed the evolution of the disease from 1970-1975 in 714 Indian patients suffering from non-lepromatous leprosy. Of the 432 (60.5%) patients who could be examined, the majority (425) had single lesions, of which 74% healed by themselves and only 6.2% became worse. (DP-E)

6843 **Ellestad-Sayed, J., Coodin, F.J., Dilling, L.A., Haworth, J.C.** *Breast-feeding protects against infection in Indian infants.* Canadian Medical Association Journal (Ottawa), 120(3), 3 Feb 1979, 295-297. Engl. 16 refs.

A retrospective study undertaken in two Manitoba (Canada) Indian communities of 28 breast-fed, 58 early weaned, and 72 fully bottle-fed infants revealed that the last were hospitalized with infectious diseases 10 times more often and spent 10 times more days in hospital during the 1st year of life than fully breast-fed infants. Breast-feeding was strongly protective against both severe infections, such as respiratory tract infections and gastroenteritis, and minor infections. The protective effect, which lasted even after breast-feeding was discontinued, was independent of family size, overcrowding, family income, and parental education. The promotion of breast-feeding in northern communities should therefore be given high priority. Statistical data are included. (Modified journal abstract)

6844 **Essien, E.S., Osuhor, P.C.** *Rural water quality control measures: an experience in the Malumfashi district of northern Nigeria.* Public Health (London), 93(6), Nov 1979, 363-370. Engl. 17 refs.

Water quality assessment combined with a health education programme was carried out in northern Nigeria from July 1976-April 1977. The authors collected general information on water sources, location, and sanitary qualities and analyzed water from 10 ponds, 30 wells, and 10 public standpipes. Results showed that ponds were more heavily contaminated than wells or standpipes. The incidence of gastroenteritis increased with the volume of water drunk. Poor location and unsanitary facilities were the major causes of water pollution. Health education offered to the villagers included demonstrations of simple water filtration and sterilization methods. Statistical data are included. (FM)

6845 **Ford, G.W., Belbin, R., Jose, D.G., Vorbach, E.A., Kirke, D.K.** *Growth and immune function in Aboriginal children during recovery from malnutrition and infection.* Australian and New Zealand Journal of Medicine (Sydney), 6(4), Aug 1976, 321-328. Engl. 55 refs.

Of 41 Aboriginal children aged 6 months-8 years admitted to hospital with severe acute infections, 28 were undernourished, 2 had marasmic kwashiorkor, and all had the expected high levels of circulating immunoglobulins. Despite antibiotic therapy, immunoglobulin levels did not decrease during at least 10 days of hospital treatment and 50% of the children were readmitted with a further infection within 6 months. It is suggested that the persistently elevated levels of immunoglobulins—a common feature in communities with a high prevalence of malnutrition—result from repeated infections. Statistical data are included. (DP-E)

6846 **Freed, E.D.** *Community psychiatric programme for Soweto; report on a pilot study.* South African Medical Journal (Cape Town), 55(17), 21 Apr 1978, 679-682. Engl.

The organization and functions of a community psychiatric centre established in 1971 in Soweto (South Africa) are described. The centre is staffed by two psychiatric nurses and a part-time psychiatrist. A study of 50 randomly selected patients, all of whom were treated by drug therapy, revealed that 17 (40%) were able to return to full-time work; 14 of these patients were schizophrenic, compared to 50% of the entire sample, and 12 of them were female. Statistical data are included. (DP-E)

6847 **Freij, L., Sterky, G., Wadstrom, T., Wall, S.** *Child health and diarrhoeal disease in relation to supply and use of water in African communities.* Progress in Water Technology (Oxford, UK), 11(1), 1978, 49-55. Engl. 15 refs.

In a 1972-1973 and 1974-1975 survey of acute morbidity in 749 children from Addis Ababa (Ethiopia), it was found that children aged less than 2 years were ill with diarrhea for an average of 2 months each year. Personal hygiene and quantity of water were the most significant predictors of the disease. Later aetiological studies yielded putative agents, mainly rotaviruses, in 60% of the children who were ill during the rainy season. Both wells and river water were contaminated with *Entamoeba coli*, indicating that African waters have unique characters as sources of infection. Intermediate technologies and community involvement are seen as the best solutions. (DP-E)

6848 **Freitas, V.** *Otite em pré-escolares distróficos. (Otitis in dystrophic preschoolers).* Jornal de Pediatria (Rio de Janeiro, Brazil), 44(4), Apr 1978, 232-235. Portuguese. 8 refs.

Examination of 212 undernourished preschoolers in Brazil revealed that 20% had *otitis media* and that 6.1% had it in chronic form (i.e., unresponsive to treatment). The potential for permanent hearing damage occasioned by such high level *otitis media* prompts the authors to recommend regular audiometric screening and treatment of schoolchildren. An outline of the various infective agents and their susceptibility to antibiotics is presented. Statistical data are included. (HC-L)

6849 **Froozani, M.D.** *Weight, height and arm circumference of a group of low income Esfahan children.* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(3), 1978, 117-119. Engl. 11 refs.

Weight, height, and arm circumference of 400 Enfahan children aged 1-24 months attending the Pahlavi (Iran) Public Health Center were measured. The results are discussed and presented as statistical data. In general, it was found that 240 (60%) of the children had weight:age and 58 had height:age ratios that were less than Boston (USA) standards. (DP-E)

6850 **Fuglsang, H., Anderson, J., Marshall, T.F.** *Studies on onchocerciasis in the United Cameroon Republic; V: a four year follow-up of 6* *rain-forest and 6 Sudan-savanna villages: some changes in skin and lymph nodes.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 73(1), 1979, 118-119. Engl.

Onchocerciasis was studied for 4 years in 418 patients from the rain forest and 535 patients from the savanna in Cameroon. During this time, in the rain forest the incidence of depigmentation of the skin was 6.6%, atrophy 38%, and hanging groin 4.4%, while the corresponding figures in the savanna were 1.6%, 47%, and 1.0%, respectively. The incidence of skin atrophy was correlated with a high intensity of infection but the other changes were not. (Modified journal abstract)

6851 **Fuller, G.K., Gemeda, N., Fuller, D., Demerest, V.** *Tuberculin skin test survey in southwestern Ethiopia.* Tropical and Geographical Medicine (Haarlem, Netherlands), 31(3), Sep 1979, 365-373. Engl. Refs.

A study to determine the prevalence of positive skin test reactions in an isolated region of southwestern Ethiopia is described. The authors found marked differences between the population groups studied. The Dassanetch, who live in large villages with a high population density, had the highest number of positives (53.7%). The Hamar, who live in small scattered homesteads, had the lowest (11.5%). The Bale, Suri, and Nyangatom, living in small- to medium-sized settlements, had 32.5%, 27.9%, and 20.7% positivity, respectively. Sex differences were minimal, although men overall had a slightly higher rate than women. Age differences were marked, particularly where prevalence is high, with the sharpest increase occurring under 14 years of age. Statistical data are included. (Modified journal abstract)

6852 **Fuller, G.K., Lemma, A., Haile, T.** *Schistosomiasis in Omo National Park of southwest Ethiopia.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 28(3), May 1979, 526-530. Engl. 10 refs.

Schistosomiasis mansoni infection was found in more than 50 tourists who had visited Omo National Park, Ethiopia, and gone swimming in the Mui River. A survey revealed the presence of the disease in 41% of park residents and 33% of the neighbouring Suri people and also in local wildlife. Trematode larvae were found in 27% of the river's snails. The source of the disease and the implications of its spread for the future development of the Omo Valley are discussed. Statistical data are included. (DP-E)

6853 **Gebre-Medhin, M., Sterky, G., Taube, A.** *Observations on intrauterine growth in urban Ethiopia.* Acta Paediatrica Scandinavica (Stockholm), 67(6), 1978, 781-789. Engl. 41 refs.

A total of 3 144 deliveries comprising a wide range of socioeconomic groups in Addis Ababa (Ethiopia) was studied. A positive correlation was found between family income and birth weight, with a difference of nearly 500 g between the extremes of socioeconomic classes. A seasonal variation in mean birth weight was also observed. The mean length of gestation was 7.4 days shorter and the anthropometric measurements at birth were significantly lower in the Ethiopian infants than in the Swedish norm. The median weight and length development in relation to gestational age in the Ethiopian newborn infants was similar to the Swedish standard up to about 34 or 35 weeks of gestation. After that time, there was very little further intrauterine growth in Ethiopian infants. The possible reasons for the objserved pattern of growth are discussed. Statistical data are included. (Modified journal abstract)

6854 **Getz, L.L., Prather, P.C., Platt, H.M.** *Schistosomiasis in South America; I: current status in Brazil.* Biologist (Denver, Col.), 57(4), Nov 1975, 143-165. Engl. Refs.
See also entry 6464.

The epidemiology of schistosomiasis in Latin America is reviewed, with emphasis on Brazil. The distribution and ecology of the three intermediate hosts—*Biomphalaria glabrata*, *B. straminea*, and *B. tenagophila*—are examined. Transmission of schistosomiasis in Brazil is primarily related to community and household, rather than farming, activities. Possible control measures include prevention of human contact with water, mass clinical treatment of infected humans, environmental sanitation, and snail control. A combination of these methods is recommended. (DP-E)

6855 **Ghadirian, E., Croll, N.A., Gyorkos, T.W.** *Socio-agricultural factors and parasitic infections in the Caspian littoral region of Iran.* Tropical and Geographical Medicine (Haarlem, Netherlands), 31(3), Sep 1979, 485-491. Engl.

Surveys for intestinal parasites in villages in the Babol area of the Caspian littoral region of Iran were conducted from 1972-1977. During this period, mass chemotherapy and individual treatment were also administered. While the overall prevalence of parasitic disease was reduced after these campaigns, reinfection took place repeatedly and at a rapid pace. This paper re-examines the prevalence of seven helminth species on the basis of geographical and socioagricultural criteria. The considerable differences in the prevalence of these parasitoses, even between neighbouring villages, emphasize the variability of human ecology in the region. Statistical data are included. (Modified journal abstract)

6856 **Goh, K.T.** *Enteric infections in Singapore with special reference to typhoid.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 9(3), Sep 1978, 433-439. Engl. Refs.

Despite the fact that 76% of the population is connected to a sewage system and 99.5% supplied with potable water, there has been no significant decrease in the incidence of enteric diseases in Singapore. The major infections are: typhoid and paratyphoid (10.4:100 000), which mainly affect children aged 5-14 years; cholera El Tor, although the young people who are the main carriers are not often affected; salmonelloses, of which 44.6% of cases occur in infants; and *Vibrio parahemolyticus*, which is mainly found in food. Statistical data are included. (Modified journal abstract)

6857 **Goldman, N.** *Far eastern patterns of mortality.* Population Studies (London), 34(1), 1980, 5-19. Engl.

This study identifies a pattern of mortality that seems to occur only in Far Eastern populations and has not been previously described by model mortality schedules. As compared with either model life tables or actual mortality schedules in other parts of the world, mortality schedules in Taiwan, Hong Kong, Singapore, and Korea have been characterized by much higher than expected death rates of adult men and large sex differences in death rates for adults. This excess mortality was more pronounced in the 1950s and 1960s than in recent years. Evidence suggests that a high level of exposure to tuberculosis causes much of the excess mortality in male adults; the sexual differences remain unexplained. Statistical data are included. (Modified journal abstract)

6858 **Goulart, E.G., Jourdan, M.C., Brazil, R.P., Brazil, B.G., Coseudey, A.E.** *Ecological control of hookworm and strongyloidiasis.* Journal of Helminthology (London), 51(2), 1977, 131-132. Engl.

A 26-month disease control programme to combat hookworm and strongyloides was carried out in two shanty town populations in Brazil. Both groups were treated with anthelminthics and plants known to have antiparasitic properties were introduced into one area, leaving the other as a control. Only lemon grass (*Cymbopogon citratus*) survived and attained an average clump density of 1:10m². Ancylostomiasis levels fell in the planted area from 23.2%-2.2% and in the control area from 14.5%-5.8%; strongloidiasis fell from 17.1%-0.6% in the planted area and from 13%-2.9% in the control area. (DP-E)

6859 **Graves, P.L.** *Nutrition and infant behavior: a replication study in the Katmandu Valley, Nepal.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(3), Mar 1978, 541-551. Engl. 30 refs.

A study of the developmental and behavioural characteristics of 36 well-nourished and 38 undernourished infants aged 7-18 months and their mothers was undertaken in Katmandu, Nepal. The undernourished infants exhibited reduced exploratory behaviour, reduced levels of attachment behaviour, and a heightened need for physical closeness to the mother—behaviours that significantly limit contact with the environment, contribute to "functional isolation," and influence the child's long-term social/emotional development. Maternal behaviour *vis-à-vis* the child did not significantly differ between the two groups, but parental education did, indicating a need for education programmes on nutrition and infant care geared to village life. A detailed analysis of the study findings is presented. (HC-L)

6860 **Grech, E.S.** *Obstetric deaths in Lusaka.* Medical Journal of Zambia (Lusaka), 12(2), 1978, 45-53. Engl. 16 refs.

Analysis of mortality data at the University Teaching Hospital, Lusaka, Zambia for the years 1971-1976 revealed that both the maternal and the perinatal death rates have risen steadily since 1973. Avoidable factors were identified in 79.6% of the maternal and 49.1% of the perinatal deaths. This paper discusses the reasons for the deaths, separating inside factors (nursing shortages, overcrowding, etc.) from outside factors (breakdown in referral system, failure to seek antenatal care, etc.) and makes some suggestions for improving the situation. Seven tables and five graphs of data are presented. (HC-L)

6861 **Gross, R.L., Newberne, P.M.** *Role of nutrition in immunologic function.* Physiological Reviews (Bethesda, Md.), 60(1), Jan 1980, 188-302. Engl. 457 refs.

This document deals with recent studies of the interrelationship between malnutrition and immunity and the role of specific nutrients in malnutrition. Subjects discussed include protein-calorie malnutrition and its relation to kwashiorkor and marasmus, amino acids and immune function, vitamin deficiencies and their significance, iron and trace elements, obesity, fatty acids and immunity, sugar and immunity, and intrauterine and early postnatal malnutrition. In summary, the authors state that it is increasingly evident that dietary levels and types of fat play an important role in the regulation of immunity. Statistical data are included. (AF)

6862 **Gupta, M., Jain, A., Singh, R.N.** *Nutritional status of urban and rural preschool children in western Rajasthan (in and around Bikaner City); I: anthropometric study.* Indian Journal of Pediatrics (Calcutta, India), 45(367), Aug 1978, 247-254. Engl. Refs.

Anthropometric measurements of 1 235 rural (66.1%) and urban (33.9%) Indian preschoolers were used to assess the children's nutritional status. The results are discussed and presented as statistical data. Although there was not much difference between the urban and rural groups as a whole, females in both groups had lower values in comparison to males. These findings are compared to those of other Indian nutritional studies. (DP-E)

6863 **Gupta, P.R., Dutta, A.K., Dutta, P.** *Growth and developement; a cross-sectional study of pre-school children.* Indian Journal of Pediatrics (Calcutta, India), 45(365), Jun 1978, 189-195. Engl. Refs.

The growth and development of 600 urban preschool children of different social classes drawn from the catchment area of the Medical College, Jaipur, India, were studied by house-to-house visits and direct questioning of the parents. In most children, development was within normal limits, but there was a lower standard of growth than 1968 Indian Council of Medical Research recommendations, probably because of poor economic and other environmental factors. All children had had smallpox vaccinations, but the status of immunizations was poor though facilities for them were available. Pica was the most common behavioural disorder. Statistical data are included. (Modified journal abstract)

6864 **Gupte, S., Pal, M., Cupta, C.L., Joshi, R.R.** *Prevalence of intestinal parasitic infestations among children attending hospital.* Indian Journal of Pediatrics (Calcutta, India), 45(362), Mar 1978, 86-88. Engl.

A study of 1 000 unselected children followed-up at an outpatient consultation and of 500 children hospitalized in Jammu, India, for digestive disorders revealed the presence of helminthic infestation in 54.8% of the 1st group and 75% of the 2nd. The incidence of the most common protozoal infestation, *Giardia lamblia*, was 25% and 41.6% and that of *Ascaris lumbricoides*, the most common helminth, 20% and 29.2%, respectively. The degree of infestation is compared with that of six other areas of India. Statistical data are included. (DP-E)

6865 **Güray, O., Çokan, Y.** *Çocuklarda, zekâ geliçiminde kirsal ve kentsel bölge etkenligi (IQ development of children with the effects of urban and rural areas).* Tip Fakultesi Mecmuasi (Istanbul, Turkey), 41, 1978, 429-435. Turkish. 1[illegible] refs.

Intelligence quotients of two groups of children who were chosen from both rural and urban areas were estimated by the use of Binet-Terman and Goodenaugh standards and their socioeconomic levels, environmental factors, and familial structures were determined by a survey using questionnaires. When the results were evaluated, the differences between children from rural and urban areas were significant. Statistical data are included. (Modified journal abstract)

6866 **Hernández, M., Aguirre, J., Serrano, L., Moreno, J. del C.** *Evaluaciòn de las actividades de campo del plan educativo para la alimentaciòn de la poblaciòn rural. (Assessment of the field activities of the rural nutrition education campaign).* Salud Pública de México (Mexico City), 21(2), Mar-Apr 1979, 135-143. Span.

A nutrition campaign aimed at improving child feeding practices, increasing pregnant and lactating mothers' food consumption, and diversifying family diets was carried out in 27 rural regions throughout Mexico. This paper presents the results of the surveys that were used to evaluate the effects of the campaign on nutrition knowledge and practices. About 50% of the families accepted the new ideas regarding infant feeding and at least one technique of preparing food hygienically; 60% recognized the importance of combining different foods in one dish, even though they could not always afford to do so. These results were particularly encouraging, since the community members sampled were not necessarily the same ones who attended the campaign talks and demonstrations. (HC-L)

6867 **Heymann, D.L., Nakano, J., Durand, B.** *Essai controlé d'un vaccin antirougeoleux thermostablé au Camèroun. (Controlled test of a thermostable measles vaccine in Cameroon).* Médecine Tropicale (Marseilles, France), 39(1), Jan-Feb 1979, 67-70. Fren.

Following laboratory tests, the measles vaccine Rimevax was tested under normal field conditions in tropical countries in order to determine whether or not its effectiveness was altered by exposure to higher temperatures. Results showed that, after being exposed to temperatures from 23-25°C for 7 days and then reconstituted with a solvent stored under the same conditions, the vaccine was as effective as that stored under optimum conditions. A seroconversion rate of 87%-100% was obtained among children aged 9-24 months who received the vaccine. This stability makes the vaccine ideal for field use, but further tests should be carried out. (FM)

6868 **Hofler, W., Pech, H.** *Ernährungs- und Gesundheitszustand von unter Fünfjährigen der Mentawai-Insel Sipora/Indonesien. (Nutrition and health of children aged less than five years on the Mentawai Island of Sipora, Indonesia).* Tropenmedizin und Parasitologie (Stuttgart, Germany FR), 29(4), 1978, 497-508. German. Refs.

Weight, height, head, chest and arm circumference, and skinfold thickness of 223 children aged less than 5 years on the island of Sipora, Indonesia, were measured. Comparable to standard international values at birth, the anthropometric data decreased during the 1st 2-3 years and rose again in the following years. Perinatal mortality was low (2.9%) and then ranged from 15%-24% for the 1st 5 years. Hospital records of sick children showed no manifest protein-energy malnutrition. The most frequent illnesses were diseases of the respiratory tract, followed by malaria, diarrhea, ascaris and hookworm infections, and skin infections. Statistical data are included. (Modified journal abstract)

6869 **Hofling de Pádua Dias, M., Hayashi, A.** *Prova tuberculínica, BCG oral e infecção tuberculosa em crianças menores de 5 anos. (Tuberculin test, oral BCG vaccine, and tuberculosis infection among children aged less than 5 years).* Revista de Saúde Pública (São Paulo, Brazil), 12(4), 1978, 443-454. Portuguese. 25 refs.

Tuberculin reactions in 665 children aged less than 1 year and in 1 298 children aged 1-4 years were studied in order to clarify the relation between BCG oral vaccination and tuberculin positivity. Analysis of the data revealed that children who had received three or more doses of oral vaccine were more frequently among the "strong positive" reactors in the youngest group but not in the group aged 1-4 years. This finding lends support to the theory that BCG oral vaccination affects tuberculin positivity but that its impact diminishes with time. (HC-L)

6870 **Hopkins, D.R.** *Yaws in the Americas, 1950-1975.* Journal of Infectious Diseases (Chicago, Ill.), 136(4), Oct 1977, 548-554. Engl. 49 refs.

In the 1950s, yaws eradication programmes were undertaken in almost all American countries where the disease was endemic. By mass treatment with penicillin, the incidence was reduced from some 44 000 cases annually from 1950-1954 to 437 cases in 1975. In Brazil, disease control efforts reduced the number of patients treated by 99% from 1965-1974. By 1975, yaws apparently remained a significant health problem in only a few areas of Brazil, Colombia, Dominica, Ecuador, Haiti, Peru, St. Lucia, and St. Vincent and possibly in Guyana and Surinam. It may be possible to eradicate yaws completely during the next few years. Statistical data are included. (Modified journal abstract)

6871 **Hubbard, C.** *Maternal practices of baby feeding and hygiene in the city of Ludhiana, Punjab, India.* Indian Journal of Pediatrics (Calcutta, India), 45(369), Oct 1978, 318-322. Engl. 8 refs.

In this Indian study, 66 mothers of children aged 12-24 months were questioned concerning their family and socioeconomic status, the children's age and weight, the onset and duration of breast-feeding, the incidence of diarrhea and vomiting in their children, the preparation of artificial feeds, and the cleaning and boiling of feeding apparatus. The implications of the information are discussed. It is noted that 59% of the children examined were malnourished due to early weaning and poor hygiene habits despite the availability of health services in urban Ludhiana. (DP-E)

6872 **Huffman, S.L., Chowdhury, A.K., Chakraborty, D.J., Simpson, N.K.** *Breast-feeding patterns in rural Bangladesh.* American Journal of Clinical Nutrition (Bethesda, Md.), 33(1), Jan 1980, 144-154. Engl. 34 refs.

A multiple phase study of breast-feeding patterns in a rural area of Bangladesh is described. Of the children born alive to nearly 1 500 women from February-September 1974, 75% were breast-feeding at 30 months of age; 30 months was also the median duration for breast-feeding. Pregnancy and insufficient milk were the main reasons for cessation of breast-feeding. In the 2nd phase of the study, 200 breast-feeding women with children aged 17-25 months were followed longitudinally for 18 months or until the mothers conceived. Total suckling time was inversely associated with socioeconomic factors and infant nutritional status. No association was found between mean suckling time and maternal nutritional status, maternal morbidity, infant morbidity, or child's sex. Statistical data are included. (Modified journal abstract)

6873 **Jackson, R.T., Latham, M.C.** *Lactose and milk intolerance in Tanzania.* East African Medical Journal (Nairobi), 55(7), Jul 1978, 298-302. Engl. 13 refs.

Data are presented on the prevalence of lactose intolerance among various population groups in Tanzania, as well as comparisons of the primary methods used in determining intolerance prevalence rates: the lactose tolerance test (LTT) and the milk load test. Intolerance among the Bantu and Masai was 92% and 62%, respectively, as measured by the LTT, while the milk load test gave a 77% intolerance among the Bantu. The data support the notion that the low level of milk intake is not primarily a function of intolerance but mainly of availability and price of milk. Although intolerant populations can drink nutritionally useful amounts of milk, this does not mean that where milk is in short supply, it should be imported. Statistical data are included. (Modified journal abstract)

6874 **Joesoef, A., Cross, J.H.** *Human filariae in Indonesia.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 9(1), Mar 1978, 15-19. Engl. 12 refs.

The distribution of human filaria in Indonesia has not changed significantly since initial reports of the disease were made in 1928. Surveys indicate that *Wuchereria bancrofti* and *Brugia malayi* are widely distributed but the newly described *Brugia timorii* appears to be restricted to the lesser Sunda Islands. *W. bancrofti* and *B. timori* in Indonesia are nocturnally periodic and *B. malayi* has nocturnally periodic and nocturnally subperiodic strains. Statistical data are included. (Modified journal abstract)

6875 **Joseph, M.V., Joy, N.C.** *Immunization status in a rural community; a study of 360 families.* Indian Pediatrics (Calcutta, India), 13(12), Dec 1976, 929-933. Engl.

Immunization status of 1 042 Indian children from 360 families and 6 villages was studied by a random sampling method. Immunization rates of smallpox, BCG, triple antigen, and oral polio vaccination were

73%, 50%, 12%, and 8%, respectively. In comparison to an urban study, the rate of smallpox was found to be lower, but that of BCG was higher. Incidence of certain immunizations was found to be related significantly to female literacy and socioeconomic status. Statistical data are included. (Modified journal abstract)

6876 **Kamalamma, A., Ravi, R., Govindaraj, V., Srinivasa, D.K., Roy, A.K.** *Trends in utilisation of maternal care services in a rural community.* Nursing Journal of India (New Delhi), 70(6), Jun 1979, 162-164. Engl.

To determine trends in utilization of maternal child health services in a rural area of India, this 1977 study followed-up until 42 days after delivery all women registered at the Jawaharlal Institute Rural Health Centre, Ramanathapuram, Pondicherry state. Utilization patterns with regard to registration, antenatal home and clinic visits, tetanus immunization, etc., were compared with those of women treated in 1967. The findings suggested progressive improvement in the utilization of maternal services; maternal mortality was also reduced from 10.6-2.8:1 000 live births. Statistical data are included. (DP-E)

6877 **Katiyar, G.P., Agarwal, D.K., Yadav, R.C.** *Growth standards for urban and urban slum area infants of Varanasi.* Indian Pediatrics (Calcutta, India), 15(4), Apr 1978, 301-309. Engl. 18 refs.

This comparative Indian study of 25 well-to-do urban infants and 25 infants from urban slums affirms that children from higher socioeconomic classes, especially males, achieve better growth rates and should be used as the national norm. Various anthropometric measurements are discussed and presented as statistical data. The authors suggest that, unless maternal child health services in urban slums are improved, infants from those areas will continue to be both mentally and physically retarded. (DP-E)

6878 **Kawata, K.** *Of typhoid fever and telephone poles: deceptive data on the effect of water supply and privies on health in tropical countries.* Progress in Water Technology (Oxford, UK), 11(1), 1978, 37-43. Engl. 11 refs.

This article examines reasons why water supply and treatment projects and latrine construction are frequently unsuccessful in reducing health problems in developing countries. Often these projects are improperly reported or evaluated and local inhabitants continue to use contaminated water sources even when clean water is available, usually because the supply of clean water is inadequate or the equipment that produces it is temporarily out of order. Latrines in both rural and urban areas are frequently shared and, unless properly maintained, they themselves provide a source of infection. The author points out that the installation of water supplies and latrines in a village, without parallel improvement in housing and socioeconomic status, does not lead to an automatic improvement in health status. Statistical data are included. (DP-E)

6879 **Kerr, A.A.** *Recurrent respiratory disease in Polynesian children.* New Zealand Medical Journal (Wellington), 87(613), 14 Jun 1978, 382-384. Engl. 8 refs.

One of the major pediatric problems in New Zealand is the high incidence of respiratory disease in Polynesian infants. This paper presents the results of a study of 13 infants aged 6-15 months who suffered from recurrent respiratory infection. Tests included routine haemoglobin, packed cell volume, total and differential leucocyte counts, serum immunoglobulins, and a qualitative demonstration of precipitating antibodies to whole cow's milk protein. The fact that 6 out of 11 children exhibited precipitating antibodies to cow's milk protein suggest that cow's milk may be implicated in the pathogenesis of respiratory disease and merits further study. Statistical data are included. (HC-L)

6880 **Khanjanasthiti, P., Dhanamitta, S.** *Breast feeding practice and growth of infants in Thailand.* Journal of the Medical Association of Thailand (Bangkok), 61(6), Jun 1978, 340-344. Engl.

Patterns of infant feeding in urban and rural Thailand and related malnutrition are examined. Although the practice of breast-feeding is also declining in rural areas, the prevalence of bottle-feeding in urban and suburban areas such as Bangkok has meant that the growth of the average child is below standard by the age of 6 weeks and that most children are classifiably malnourished by the age of 6 months. The authors recommend that health education and legislation controlling advertisement of infant foods be implemented and that professional women be encouraged to set a good example. (DP-E)

6881 **King, B.** *Measles vaccination in a rural Tanzanian community.* East African Medical Journal (Nairobi), 55(6), Jun 1978, 252-255. Engl. 9 refs.

The success rate of a 1975 measles vaccination administered to 5 263 children from 36 villages in the Mwanza region of Tanzania was estimated on the basis of 169 prevaccination and 129 postvaccination specimens (dried blood on filter paper). The overall seroconversion rate was found to be 78% in children aged more than, and 53% in children less than, 1 year. Problems related to the storage of live measles vaccine under tropical conditions and the optimum age for immunization are discussed. It is recommended that children first vaccinated before the age of 1 year be revaccinated later, if at all possible. Some statistical data are included. (HC-L)

6882 **Kloos, H., Lemma, A.** *Bilharziasis in the Awash Valley; III: epidemiological studies in the Nura Era, Abadir, Melka Sadi and Amibara irrigation schemes.* Ethiopian Medical Journal (Addis Ababa), 15(4), Oct 1977, 161-168. Engl. 8 refs.

A study of four farms in the Awash Valley, Ethiopia, revealed a *Schistosoma mansoni* prevalence of 7.6% and 6.3% on the two upper valley cotton farms, while a banana plantation and the cotton farm in the lower valley had infection rates of 3.7% and 2.1%, respectively. Although none of the pastoralists in the lower valley were infected, those of the upper valley showed infection rates of 14.6% and 14.8%. The prevalence of the disease is correlated to the occurrence of the snail host, *Biomphalaria pfeifferi*. Local application of molluscicide is recommended. Statistical data and maps are included. (DP-E)

6883 **Kojima, S., Akahane, H., Uchikawa, K., Yokogawa, M., Hata, H.** *Ascariasis: endemic foci in Shiga prefecture, Japan, and a trial of masstreatment with dry syrup of pyrantel pamoate.* Japanese Journal of Parasitology (Tokyo), 27(2), 1978, 151-159. Engl. 22 refs.

After a 1977 epidemiological survey of Imazu-machi, a rural Japanese village, revealed a high prevalence of ascariasis and other intestinal parasites, the anthelminthic properties of the dry syrup form of pyrantel pamoate were tested by administering varying doses of the drug to 103 infected villagers. A dose as low as 2.5 mg:kg was almost 100% effective and there were no side effects. A comparison of different techniques of stool examination indicated that the formol-ether concentration most effectively detected all parasite ova, while Stall's dilution method and the Kato thick smear technique were better for *Ascaris* ova alone. Statistical data are included. (DP-E)

6884 **Kuruvilla, J., Srinivasa Rao, P.N.** *Ocular morbidity in school children in rural coastal area of Karnataka.* Indian Journal of Ophthalmology (Bombay, India), 26(2), Jul 1978, 9-12. Engl. 8 refs.

This paper presents and discusses the results of an examination by a mobile eye unit of 8 496 primary schoolchildren in a previously uninvestigated rural *taluk* in coastal Karnataka, India. The study sample represents 10% of the *taluk*'s primary school population and is therefore statistically significant. The results indicate the need to screen children early for partial blindness (incidence: 0.64%) and to provide some special training for the visually handicapped. They also suggest that trachoma and vitamin A deficiency, although less prevalent here than in other parts of India, are always in the background. Eight tables of data are included. (HC-L)

6885 **Lampl, M., Johnston, F.E., Malcolm, L.A.** *Effects of protein supplementation on the growth and skeletal maturation of New Guinean school children.* Annals of Human Biology (London), 5(3), 1978, 219-227. Engl. Refs.

Over an 8-month period, 86 Bundi schoolchildren from the highlands of Papua New Guinea were divided into three groups and given, respectively, the basic vegetarian diet, the basic diet supplemented daily with 10 g skim milk powder, and the basic diet plus 20 g of the supplement daily. Subsequent anthropometric measurements revealed: that the supplemented children showed greater increments for height, weight, periosteal bone breadth, and skeletal maturation than did the non-supplemented children; that unsupplemented children exhibited an increase in skinfold thickness while supplemented children showed no change; and that the response to supplementation was consistently greater among children receiving 20 g of the supplement. Details of the study methodology and a more thorough analysis of its findings are given. (HC-L)

6886 **Lancet, London.** *BCG: bad news from India.* Lancet (London), 1(8159), 12 Jan 1980, 73-74. Engl. 17 refs.

The history and use of BCG vaccination is traced. Although its effectiveness in developed countries can be demonstrated, recent trials have shown that BCG vaccination has no or possibly even a negative effect on the incidence of tuberculosis in developing countries. The reasons for this are discussed. BCG vaccination also induces tuberculosis sensitivity, thus reducing the usefulness of tuberculosis testing as a tool in diagnosis and contact tracing. It is suggested that other control strategies might be more cost-effective. (DP-E)

6887 **Larguia, A.M., Urman, J., Stoliar, O.A., Ceriani, J.M., O'Donnell, A.** *Fresh human colostrum for the prevention of* E. coli *diarrhea—a clinical experience.* Journal of Tropical Pediatrics and Environmental Child Health (London), 23(6), Dec 1977, 289-290. Engl. 10 refs.

A 2-year epidemic of *Entamoeba coli* diarrhea in the premature nursery of Sarda Hospital, Buenos Aires, Brazil, was finally brought under control when the babies were administered fresh human colostrum at a daily dose of 5 cc:kg. Of 280 premature infants thus treated, 56 (20%) manifested *Entamoeba coli* in the stools but only 3 presented mild diarrhea of limited duration. (HC-L)

6888 **Laroche, R., Sirol, J., Peghini, M.** *Fièvre typhoïde à Bangui (Empire Centrafricain); à propos de 100 observations. (Typhoid fever in Bangui (Central African Empire); report of 100 cases).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 71(1), 1978, 54-63. Fren. Refs.

The authors treated 100 cases of typhoid fever in Bangui, Central African Empire, in 1976. Patients ranged in age from infants to adults aged more than 50 years. The causative organism was exclusively

Salmonella typhi, all strains of which were sensitive to chloramphenicol, ampicillin, and cotrimoxazole. The Widal reaction was of some value in diagnosis. Fever and headache were frequent symptoms and six cases presented as broncopneumonia. Diarrhea occurred in 16 patients. Classic symptoms such as rose spots and enlarged spleens were rare. This report indicates that typhoid fever is an important but treatable disease in urban Africa. (Modified journal abstract)

6889 **Lechtig, A., Martorell, R., Delgado, H., Yarbrough, C., Klein, R.E.** *Food supplementation during pregnancy, maternal anthropometry and birth weight in a Guatemalan rural population.* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(5), Oct 1978, 217-222. Engl. 25 refs.

In a study of the relationship between food supplementation and maternal nutrition, pregnant women in four Guatemalan villages were given a calorie or a protein-calorie supplement and their anthropometric measurements (mass and length, circumferences, diameters, and skinfolds) were taken. It was found that supplementation was positively associated with maternal monthly weight gain and that maternal measurements of mass and length and perimeters positively correlated with infant birth weight. It is concluded that food supplementation improves maternal, as well as infant, nutritional status and that correlations between birth rate and maternal size could be used as the basis for simple risk indicators for low-birth-weight babies. (HC-L)

6890 **Lewert, R.M., Yogore, M.G., Blas, B.L.** *Schistosomiasis japonica in Barrio San Antonio, Basey, Samar, the Philippines; I: epidemiology and morbidity.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 28(6), Nov 1979, 1010-1025. Engl. 20 refs.

The prevalence of *Schistosoma japonicum* among the 1 900 residents of a small community in the Philippines was studied by means of a household survey involving interviews, physical examinations, and the collection of stool, urine, and blood samples. The following were among its findings: *S. japonicum* infects 70% of the population aged more than 10 years, 25% of the infected have hepatomegaly and a significant number exhibited splenomegaly; a discernible but temporary arrest in growth was evident in infected children; and diarrhea and dysentery were more frequent in infected persons. The findings of this study are presented in eight graphs and nine tables; they provide good baseline data against which to measure the results of future disease control measures. (HC-L)

6891 **Limsuwan, A., Suphokarn, V., Nanna, P., Ammantayakul, O., Buri, P.** *Role of the natural immunity to diphtheria in preventing an outbreak of the disease in the community.* Journal of the Medical Association of Thailand (Bangkok), 61(2), Feb 1978, 87-92. Engl. 19 refs.

Examination of a random sample of 190 unvaccinated rural Thai children aged 1-9 years by means of the Schick test revealed that 63.83% had a natural immunity to diphtheria. The procedure for carrying out the Schick test is described and the results are discussed and presented as statistical data. The high level of herd immunity and the presence of *Corynebacteria diphtheriae* in the skin and throat cultures of the rural villagers supports the contention that natural immunity plays an important role in preventing diphtheria outbreaks in these communities. (DP-E)

6892 **Lovelace, J.K., Moraes, M.A., Hagerby, E.** *Toxoplasmosis among the Ticuna Indians in the state of Amazonas, Brazil.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(3), Sep 1978, 295-300. Engl. 9 refs.

Results of a serological survey for *Toxoplasma gondii* of 408 Ticuna Indians from 5 villages in western Brazil revealed a low prevalence of antibody titres when compared to the results of a similar survey of 61 non-Indian inhabitants of the town of Codajas, Amazonas. Rates in Ticuna villages where dietary habits were most variable were higher and more similar to those of non-Indian populations than the rate in villages where fish was the main source of animal food. Statistical data are included. (Modified journal abstract)

6893 **López de Romaña, G., Creed, H.M., Graham, G.G.** *"Alimentos comunes" peruanos; tolerancia y digestibilidad en infantes desnutridos. (Tolerance and digestibility of common Peruvian foods in malnourished infants).* Archivos Latinoamericanos de Nutrición (Caracas), 28(4), Dec 1978, 419-433. Span. 20 refs.

Six diets based on common Peruvian foods—five on potatoes and wheat noodles plus a protein supplement and one on quinoa and oats—were evaluated for acceptability, tolerance, and digestibility in eight infants aged 4-19 months who were recovering from malnutrition. This paper analyzes the results of the study, which suggest that the potato/wheat-based diets can be recommended for infant feeding after 6 months of age but that the quinoa/oat diet, which was inadequately absorbed with respect to nitrogen and fat, requires further investigation. Statistical data are included. (HC-L)

6894 **Lunn, P.G., Whitehead, R.G., Coward, W.A.** *Two pathways to kwashiorkor?* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 83(4), 1979, 439-444. Engl. Refs.

Comparisons based on anthropometric and biochemical measurements have been made between Gambian and Ugandan children with kwashiorkor and Gambian children with marasmus. While the Gambian cases were similar both anthropometrically and in their plasma hormone and amino acid patterns, they differed in these respects from kwashiorkor in Uganda. These and additional findings suggest that kwaskiorkor in the Gambia and in Uganda has distinct aetiologies and possible reasons for the difference in pathophysiologies are discussed. Statistical data are included. (Modified journal abstract)

6895 **Maddocks, I.** *Papua New Guinea: Pari village.* In Hetzel, B.S., ed., Basic Health Care in Developing Countries; an Epidemiological Perspective, Oxford, UK, Oxford University Press, 1978, 11-37. Engl. 9 refs.
For complete document see entry 6343 .

Extensive epidemiological surveys were undertaken in the village of Pari, Papua New Guinea, from April 1969-March 1974. Historical, geographical, and demographic information is given and the methodology of the study outlined. All incidences of illness presented to the village clinic during the study period were noted. The development and utilization of health services in the village were also examined. Results showed that most sickness was due to a few common diseases that mainly affected children and were relatively easy to manage. The importance of local participation in community development and the effect of cultural change on health status are also discussed. (FM)

6896 **Malina, R.M., Himes, J.H.** *Patterns of childhood mortality and growth status in a rural Zapotec community.* Annals of Human Biology (London), 5(6), 1978, 517-531. Engl. Refs.

This paper presents and discusses the results of a survey of child mortality and growth in a Zapotec-speaking community (population 1 703) in the valley of Oaxaca, Mexico. Data on infant and child (aged up to 15 years) mortality were based on municipal birth and death records from 1945-1970; anthropometric measurements (height and weight) for 143 schoolchildren supplied the information on growth. The most salient findings were that preschool mortality accounts for 53.8% of total mortality and is, relatively speaking, almost twice that for the whole of Mexico and that schoolchildren exhibit the same weight:height ratios as reference American children of a younger age. Persistent protein-calorie malnutrition is probably an important contributing factor in both cases. (HC-L)

6897 **Marín Monge, J.** *Situación actual de la tuberculosis en Costa Rica—1978. (Tuberculosis situation in Costa Rica in 1978).* Acta Médica Costarricense (San José), 21(1), 1978, 3-21. Span.

In 1968, Costa Rica began integrating its tuberculosis programme with the general health services. This paper describes the methods of prevention, diagnosis, and treatment that are now in use countrywide and presents 10 tables and 6 graphs of statistical data on the prevalence and control of the disease to date. (HC-L)

6898 **Martin, C.** *Report on leaf protein feeding trial conducted at Coimbatore south India 1975-1977.* London, Find Your Feet Ltd., n.d. 3lp. Engl. Refs.
Unpublished document.

From 1975-1977, a nutrition study involving 250 children aged 30 months-5 years in Coimbatore, India, compared growth and health of children receiving a leaf protein supplement to those of children receiving one carbohydrate and three other protein supplements. The results revealed that: leaf protein was readily accepted in unmodified green form; there were no adverse side effects; general health improved, as did that of all the study children; growth response was slightly less than that of skimmed milk but equal to or better than that of other supplements; and there was a greater increase in serum retinol (an important factor in preventing blindness) in the children receiving the leaf protein supplement. Statistical data are included. (DP-E)

6899 **Martins Filho, J., Nunez da Silva, N., Hetem, R.T., Fernanco Ribeiro, A., Oliveira, A.M.** *Contribuição para o estudo do aleitamento materno; causas de desmame precoce e análise da morbidade incidente no primeiro ano de vida em função do tipo de aleitamento (natural ou artificial). (Contribution toward the study of breast-feeding: causes of early weaning and analysis of morbidity during the first year of life as a function of infant feeding (natural or artificial)).* Pediatria Prática (São Paulo), 49, 1978, 152-156. Portuguese.

The infant feeding patterns (natural or artificial) of 855 Brazilian mothers were followed for 1 year in order to study the reasons for early weaning and the morbidity experienced by both groups of infants. The principal reasons given for early weaning were as follows: reduction of milk supply, infant pathology, maternal pathology, orientation of pediatrician, and mother working outside the home. Breast-fed infants experienced less morbidity than artificially-fed infants, the percentage exhibiting no morbidity being 89.70% for breast-fed and 66.46% for bottle-fed infants. Statistical data are included. (HC-L)

6900 **Maru, M.** *Clinical and laboratory features and treatment of visceral leishmaniasis in hospitalized patients in northwestern Ethiopia.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 28(1), Jan 1979, 15-18. Engl. 15 refs.

The clinical and laboratory features and the response to treatment of visceral leishmaniasis were studied in 18 hospitalized patients in northwestern Ethiopia. Clinical and laboratory findings were similar to those in patients with *kala azar* in the Sudan and East Africa. Fever, hepatosplenomegaly, relative lymphocytosis, leukopenia, low platelet counts, and severe anaemia were common findings. Pentostam (sodium stibogluconate) was used to treat 17 patients and neostibosam (ethylstibamine) for one. Three patients died. Four out of the 18 patients had not visited any known epidemic area but the significance of this finding has not been fully evaluated. Statistical data are included. (Modified journal abstract)

6901 **Masaba, S.** *Schistosomiasis in Bunyala and Samia locations of western Kenya.* East African Medical Journal (Nairobi), 55(11), Nov 1978, 497-500. Engl.

A survey of 1 010 Kenyan schoolchildren from 10 primary schools revealed that 16.7% were infected with *Schistosoma mansoni* compared to the diagnosis of a single case of *S. haematobium*. The low incidence of the latter is attributed to an absence of infected snails. Statistical data are included. (DP-E)

6902 **Masters, D.K., Hopkins, A.D.** *Therapeutic trial of four amoebicide regimes in rural Zaire.* Journal of Tropical Medicine and Hygiene (London), 82(5), May 1979, 99-101. Engl. 8 refs.

A 5-month comparative clinical trial of four amoebicide regimes on 300 patients was carried out by trained auxiliaries under physician supervision at a rural hospital in Zaire. The results are discussed and presented as statistical data. Since none of the four drug combinations was demonstrably superior, the authors recommend, in the interests of standardized treatment, the next to the cheapest regime, di-iodohydroxyquiniline and oxytetracycline, because of its low incidence of side effects. This study also demonstrated that therapeutic trials can be successfully carried out under these conditions. (DP-E)

6903 **Mathur, N.K., Kanwar, A.J., Kalla, C., Ujwal, J.S.** *Leprosy in Jodhpur (Rajasthan): clinical and epidemiological study.* Leprosy in India (New Delhi), 50(2), Apr 1978, 204-209. Engl.

An analysis of patients attending a leprosy clinic in Jodhpur, a non-endemic area of India, revealed an incidence of 1.64:1 000 population. Of the 232 cases confirmed, 70% were of the lepromatous variety, males outnumbered females by 3:1, and most patients were aged 20-45 years. Possible sources of infection are discussed and a survey to determine the exact prevalence rate is called for. Statistical data are included. (IC-L)

6904 **Mayrink, W., da Costa, C.A., Magalhães, P.A., Melo, M.N., Dias, M.** *Field trial of a vaccine against American dermal leishmaniasis.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 73(4), 1979, 385-387. Engl. 9 refs.

A field trial was carried out in the eastern part of the state of Minas Gerais (Brazil) of a vaccine containing killed promastigotes of five stocks of *Leishmania*. Tests with Montenegro antigen showed that a high proportion of vaccinated persons became positive within 3 months, but circulating antibodies were not detected. A proportion of those vaccinated continued to give Montenegro reactions for up to 3 years. Lymphocyte sensitivity tests carried out on a small sample 3 years after vaccination were positive and gave no evidence of immunological depression. No cases of cutaneous or mucocutaneous leishmaniasis occurred in the trial area during the 3 years of observation. (Modified journal abstract)

6905 **McLean, M., Brennan, R., Hughes, J.M., Korzeniowski, O.M., de Souza, M.A.** *Etiology of childhood diarrhea and oral rehydration therapy in northeastern Brazil.* Bulletin of the Pan American Health Organization (Washington, D.C.), 15(4), 1981, 318-326. Engl. 26 refs.

Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 92(5), 1982.

The aims of this March-April 1978 study involving 53 children aged 2 months-7 years were to determine the aetiology of acute diarrheal cases treated at a rehydration centre in northeast Brazil during the peak diarrhea season and to evaluate the acceptability and efficacy of the oral glucose-electrolyte solution recommended by WHO. With the use of tables, the presence of enterotoxigenic *Entamoeba coli* and rotaviruses is documented and the oral and intravenous rehydration therapies and results are described. While the oral rehydration therapy was both feasible and well-accepted, it was felt that further investigation would be needed to access its potential for initial treatment of acute diarrheal diseases. (EB)

6906 **McMahon, J.E., Kolstrup, N.** *Parziquantel: a new schistosomicide against* Schistosoma haematobium. British Medical Journal (London), 2(6202), 1 Dec 1979, 1396-1399. Engl. 23 refs.

The effectiveness of the new schistosomicide praziquantel was assessed in 183 African schoolchildren aged 7-15 years who were infected with *Schistosoma haematobium*. They were stratified according to the severity of their infection and were then randomly allocated to treatment with two single-dose regimens (30 and 40 mg:kg) and a split regimen of two doses of 20 mg:kg given 4 hours apart. All three regimens were highly effective and produced few side effects. Children who initially had very high pretreatment egg loads showed a poorer therapeutic response at all dose levels and further investigations are necessary to find the optimum dose. Because of its effectiveness in a single dose and lack of toxicity, praziquantel may prove to be the ideal schistosomicide. Statistical data are included. (Modified journal abstract)

6907 **McMurray, D.N., Loomis, S.A., Casazza, L.J., Rey, H.** *Influence of moderate malnutrition on morbidity and antibody response following vaccination with live, attenuated measles virus vaccine.* Bulletin of the Pan American Health Organization (Washington, D.C.), 13(1), 1979, 52-57. Engl. 26 refs.

Following vaccination with live, attenuated measles vaccine, 74 moderately malnourished Colombian children aged 10 months produced as many antibodies and had the same degree of post-vaccination morbidity as did a well-nourished control group. These findings indicate that, unlike other types of measles vaccine, the live, attenuated type is both safe and effective in moderately malnourished populations. Statistical data are included. (DP-E)

6908 **Medina, E., Kaempffer, A.M.** *Morbilidad y atención médica en el gran Santiago. (Morbidity and medical care in greater Santiago).* Revista Médica de Chile (Santiago), 107(2), Feb 1979, 155-168. Span. 17 refs.

On the hypothesis that there exists an unsatisfied demand for medical and dental attention in greater Santiago, Chile, and that both the incidence of morbidity and the demand for services are influenced by a number of personal and environmental factors, a randomized sample consisting of 2 074 individuals in 442 households was interviewed over a 2-week period in November 1977 according to a precoded questionnaire. The results indicated that only half of the disease episodes had been seen by physicians and that the frequency of disease episodes varied inversely with standard of living and educational level. The effect of these and other dependent and independent variables is analyzed and discussed. Nineteen tables of data are included. (HC-L)

6909 **Mengesha, B., Abuhoy, M.** *Kala-azar among labour migrants in Metema-Humera region of Ethiopia.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(2), Jun 1978, 199-206. Engl. Refs.

A semi-prospective study of clinical and laboratory data on *kala azar* was made on 27 patients, mainly labour migrants, from the Metema-Humera lowlands of northwestern Ethiopia. In spite of treatment with pentavalent antimonials there was a mortality of 55.6%. The authors suspect that *kala azar* in this region is a zoonosis and suggest that the clinical picture is similar to that of the Sudan. Statistical data are included. (Modified journal abstract)

6910 **Mo-Suwan, L., Varvavithya, W.** *Clinical profile of diarrhoea at Ramathibodi Hospital during 1977.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 10(1), Mar 1979, 142-146. Engl.

A study of the medical records of 144 children admitted for diarrhea to India's Ramathibodi Hospital during 1977 indicated that rectal swab cultures yielded enteropathic organisms in 52.8% of these cases: 16.3% *Salmonella*, 16.0% *Entamoeba coli*, and 3.5% *Shigella*. These cases were highly infectious and tended to be chronic in all age groups. Methods of diagnosis are discussed. The overall mortality was 4.1%. Statistical data are included. (DP-E)

6911 **Moreno, O., Flores, P.** *Crecimiento en el primer año de vida de recién nacidos de bajo peso: pretérmino y dismaduros. (Growth in the 1st year of life of newborn infants of low birth weight: premature and light-for-dates).* Revista Cubana de Pediatría (Havana), 48(2), Mar-Apr 1976, 137-153. Span.

A study was undertaken at William Soler children's hospital, Havana, Cuba, to determine if two groups of low-birth-weight babies on the same diet would manifest similar patterns of growth. The height, weight, and cephalic perimiter of 33 premature and 17 light-for-dates infants were monitored up to age 1 year and compared with the same anthropometric measurements for normal-birth-weight (term) babies. Prematures were found to have a growth rate similar to term infants if allowance for gestational age was made; light-for-dates' growth rates were parallel to, but one standard deviation below, normal growth rates. Also, mothers of light-for-dates infants tended to be smaller, lighter, younger, and more often primaparous than mothers of prematures. Ten tables of data are presented. (HC-L)

6912 **Motabar, M., Montazemi, K.** *Prevalence of intestinal helminthiasis among the Qashgai tribe of southern Iran.* Pahlavi Medical Journal (Shiraz, Iran), 9(2), 1978, 200-207. Engl.

An examination of stool samples from 1 579 nomadic Qashqai tribesmen (Iran) revealed that 6.1% were infected with *Ascaris lumbricoides*, 0.8% with *Trichuris trichiura*, 6.7% (mainly children) with *Hymenolepsis nana*, 2.4% with *Enterobius vermicularis*, and 27.6% with *Trichostrongylus*. The prevalence of the last parasite is possibly due to the nomads' close association with sheep, which are the normal host. The low prevalence of soil-transmitted helminths is attributed to the short time spent in any one camping site together with the extreme temperatures of both winter and summer. Statistical data are included. (DP-E)

6913 **Mott, K.E., Muniz, T.M., Lehman, J.S., Hoff, R., Morrow, R.H.** *House construction, triatomine distribution, and household distribution of seroreactivity to* Trypanosoma cruzi *in a rural community in northeast Brazil.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 27(6), Nov 1978, 1116-1122. Engl. 14 refs.

Household distribution of seroreactivity to *Trypanosoma cruzi* in inhabitants was analyzed in relation to type of house construction and the distribution of *Panstrongylus megistus*, the principal domestic vector of Chagas' disease in a rural area of northeast Brazil. While no children residing in mud-brick houses were seroreactive, the highest rates occurred in residents of unplastered mud-stick houses, whose inhabitants had over 60% of the *T. cruzi* reactions and over 90% of *P. megistus* infestations. Statistical data are included. (DP-E)

6914 **Mueller, W.H., Schull, V.N., Schull, W.J., Soto, P., Rothhammer, F.** *Multinational Andean Genetic and Health Program: growth and development in an hypoxic environment.* Annals of Human Biology (London), 5(4), 1978, 329-352. Engl. Refs.

In 1972, a multidisciplinary study assessed the health status of 1 047 Aymara adults and children from northern Chile in terms of disease, morphological, physiological, and biochemical variations that could be related to the altitude of the region. At comparable ages, high altitude residents were shorter, lighter, and leaner but with more expansive and rounder chests than sea level controls. These results suggest that altitude confers allometric growth changes (expansive growth of the chest and diminished growth of the structures less related to oxygen transport) and that size changes associated with altitude are acquired during development while shape changes may be under genetic control. Copious statistical data are included. (Modified journal abstract)

6915 **Nagaty, H.F., Elahi, R., Mohajeri, M.** *Parasitological investigations on patients in Mash'had, Iran.* Annals of Tropical Medicine and Parasitology (London), 72(4), 1978, 369-375. Engl.

From 1971-1975, 11 986 patients presenting for investigation at the Department of Parasitology and Medical Entomology, Ferdwosi University, Mash'had, Iran, were examined for the presence of parasites in the stools, urine, blood, sputum, skin, and various organs. This paper describes the study methods and findings and tabulates the numbers of cases of the various infestations by site, age, and sex of host. (HC-L)

6916 **Nagpaul, D.R., Naganathan, N., Prakash, M.** *Some aspects of sputum examination in tuberculosis case-finding.* Indian Journal of Tuberculosis (New Delhi), 26(1), 1979, 11-16. Engl.

This study of 194 tuberculosis patients in Bangalore, India, tested the diagnostic accuracy of X-ray screening versus sputum examination. The results are discussed and presented as statistical data. Because the superiority of overnight sputum specimens could not be convincingly demonstrated, the authors recommend the collection of spot specimens as the standard case-finding procedure. (DP-E)

6917 **Najah, S., Birkowska, K.S., Charbonneau, P., Tchekel, J.** *Quelques considérations épidémiologiques sur la tuberculose pulmonaire dans le centre et le sud tunisiens. (Epidemiological considerations of pulmonary tuberculosis in central and southern Tunisia).* Tunisie Médicale (Tunis), 56(4), Jul-Aug 1978, 339-344. Fren.

A 1973-1975 study of pulmonary tuberculosis cases hospitalized in central and southern Tunisia revealed an overall morbidity of 46.1% for children and adolescents and 29.5% for adults. Patients with pulmonary lesions accounted for 53.5%, showing the importance of X-ray examinations for all. Resistance to antituberculin drugs appears to be gradually increasing every year. A study of BCG vaccination of children aged 0-25 years revealed that 83.4% had not been vaccinated. Moreover, tuberculosis was diagnosed in 14.6% of those who had received the vaccine, suggesting poor standards of vaccination and vaccine quality. Statistical data are included. (FM)

6918 **Namfua, P., Kim, Y.J., Mosley, W.H.** *Estimation of the impact of smallpox eradication on the expectation of life in selected less developed countries/Estimation des répercussions de l'éradication de la variole sur l'espérance de vie dans certains pays peu développés.* World Health Statistics Report (Geneva), 31(2), 1978, 110-119. Engl., Fren.

This study demonstrates the effect of national smallpox eradication campaigns on mortality and life expectancy in Brazil, India, and Nigeria. The study methodology is explained and presented in a series of formulas. The results reveal that, if smallpox were completely eradicated in these countries, life expectancy in Brazil would be increased by 0.09 years or 0.16%; in India, 0.81 years, or 2%; and in Nigeria, 0.48 years or 1.3%. It is concluded that the effect of smallpox on mortality is negligible (1%-2% of deaths per year). Statistical data are included. (DP-E)

6919 **Nandi, D.N., Mukherjee, S.P., Banerjee, G., Boral, G.C., Ghosip, A.** *Psychiatric morbidity in an uprooted community in rural West Bengal.* Indian Journal of Psychiatry (Poona, India), 20(2), 1978, 137-142. Engl. 10 refs.
Twenty-ninth Annual Conference of the Indian Psychiatric Society, Calcutta, India, Jan 1977.

A comparison of the results of two door-to-door surveys conducted by a team of psychiatrists to measure psychiatric morbidity, one in an uprooted community of low socioeconomic status and the other in a similar community of native-born Indians, revealed that, due to its higher level of aspiration, the uprooted community showed a higher level of stress-dependent mental disorders (neurosis, psychosomatic illness, and depression). The survey methodology is described and the results are discussed and presented as statistical data. (DP-E)

6920 **Nawalinski, T., Schad, G.A., Chowdhury, A.B.** *Population biology of hookworms in children in rural West Bengal; I: general parasitological observations.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 27(6), Nov 1978, 1152-1161. Engl. 49 refs.

Hookworm infection was studied over a 22-month period in 31%-49% of 1 803 children aged 1-10 years in a rural area near Calcutta (India) where both *Necator americanus* and *Ancylostoma duodenale* were prevalent. Half of the children were infected before age 5 years and 90% were infected before age 9 years, when the mean egg count reached 2 000:g of feces. Infection was significantly heavier and more prevalent among males than among females and among Muslims than among Hindus. Numerical factors have been devised to adjust fecal egg counts. Statistical data are included. (Modified journal abstract)

6921 **Neppert, J.** *Seroepidemiologische Aspekte der Onchozerkose in Liberia, West-Afrika. (Seroepidemiological aspects of onchocerciasis in Liberia, West Africa).* Tropenmedizin und Parasitologie (Stuttgart, Germany FR), 29(1), 1978, 36-38. German.

Examinations made on 1 292 Liberian adults by skin biopsy and by double gel diffusion of their sera against antigen of *Onchocerca volvulus* revealed that 36.7% showed microfilariae and 39.3% showed antibodies to *O. volvulus*. The tests also demonstrated that 65.2% of the persons with microfilariae were seropositive and 25.3% of those without. In the four localities studied, the higher the microfilaria rate, the higher was the antibody rate, but the antibody rate was not proportional to the rate of intestinal nematodes. The distribution between the sexes was approximately equal. The microfilaria rate increased with age but the antibody rate did not. Statistical data are included. (Modified journal abstract)

6922 **Nesset, T.B.** *Primary health care and rural development.* Bergen, Norway, Christian Michelsen Institute, DERAP Working Paper No. A 153, Jun 1979. 1v.(various pagings). Engl.

This document was compiled following a survey of the health-related problems, practices, and services affecting 10 small villages in Southern District, Botswana, from April-June 1978. Topics covered are malnutrition, environment and sanitation, health education and educators, immunization, maternal and child health, family planning, illness and treatment, community involvement, and recommendations. Also mentioned are the progress of the primary health care system introduced in the early 1970s, its achievements, and future aims. Statistical data are included. (AF)

6923 **Nnanyelugo, D.O.** *Effect of high-protein supplementation to the nutrient intakes of preschool children.* Nutrition Reports International (Los Altos, Cal.), 17(2), Feb 1978, 157-169. Engl. 18 refs.

A study was made of the nutritional status of Nigerian children from urban and rural families who bought more than two weekly packets of SW, a packaged supplement based on wheat and soya beans. A comparison of the anthropometric measurements of these children and those of children who did not receive the supplement revealed no difference, but no improvement was envisaged during the 6-month study. The acceptability of SW was limited by the brown colour it gave to prepared foods, its taste, and its relatively high cost. It is concluded that, before promotion of high-protein foods in Nigeria, present dietary deficiencies should be considered. Statistical data are included. (Modified journal abstract)

6924 **Obi, J.O.** *Morbidity and mortality of children under five years old in a Nigerian hospital.* Journal of the National Medical Association (New York), 71(3), Mar 1979, 245-247. Engl. 8 refs.

The major causes of morbidity and mortality in children aged less than 5 years admitted to a Nigerian hospital are presented as statistical data and discussed. These children comprised 83.6% of hospital admissions and 87.3% of deaths. The highest mortality occurred in children aged 1-4 years. Infections and malnutrition (both preventable) constituted 75.1% of total admissions and 85.8% of total mortality. Consequently, the author stresses the need for preventive community services that could reduce child mortality even without associated environmental and socioeconomic improvements. (DP-E)

6925 **Oey, K.N., Lie, G.H.** *Unknown toxic (or anti-nutritive) substance in the saga-bean.* Jakarta, Ministry of Health, 1981. 18p. Engl.
Third Symposium of the Federation of Asian and Oceanian Biochemists, Den-Pasar, Indonesia, 24-27 Jun 1981.

The saga tree (*Adenanthera pavonina Linn.*), also known as coral pea tree, belongs to the family of leguminosae. This paper reports the results of an investigation into the safety of saga beans as human food. Considered a potential source of additional protein and eaten mainly as a side dish with rice in the Indonesian diet, the boiled saga beans proved to be harmful to the rats in this experiment. The indication of a toxic substance suggests more investigation is needed to determine possible detrimental effects to human health. Ways and means using socially acceptable grass-roots technology must be found to make saga beans safe for consumption. (EB)

6926 **Olanipekun Alausa, K., Montefiore, D., Sogbetun, A.O., Olaseni Ashiru, J., Onile, B.A.** *Septicaemia in the tropics; a prospective epidemiological study of 146 patients with a high case fatality rate.* Scandinavian Journal of Infectious Diseases (Stockholm), 9(3), 1977, 181-185. Engl. 19 refs.

The findings of a 1976 survey of 146 patients with septicaemia admitted to the University College Hospital, Ibadan, Nigeria, are reported and presented as statistical data. There were 49 deaths, a case fatality rate of 33.6%. This study indicated that preventive medicine, rather than expensive antibiotics for the treatment of unusual organisms, is the more pressing need in Nigeria. (Modified journal abstract)

6927 **Olsson, B.** *Periodontal disease and oral hygiene in Arussi province, Ethiopia.* Community Dentistry and Oral Epidemiology (Copenhagen), 6(3), 1978, 139-145. Engl. 47 refs.

A 1974 dental health survey in Arussi province, Ethiopia, assessed periodontal diseases and oral hygiene in 1 700 persons aged 6-54 years. Periodontal diseases such as gingivitis were found in 83% of the sample and in 60% of children aged 6-7 years, indicating early onset. Although severe periodontal destruction was unusual before the age of 30 years, 52% of adults aged 45-54 years exhibited pocket formation. The level of periodontal disease in Ethiopia was judged to be low to moderate, possibly due to the favourable influence of the diet and traditional oral cleaning methods that encourage oral hygiene. Statistical data are included. (DP-E)

6928 **Olusi, S.O., Jessop, W.J.** *Assessment of nutritional status.* African Journal of Medical Sciences (Oxford, UK), 6(3), 1977, 149-156. Engl. Refs.

This study compares and evaluates the three most common methods of assessing nutritional status: anthropometric measurements, analysis of the composition of body fluids, and measurement of the body's reaction to malnutrition in terms of reproduction, growth, etc. Emphasis is placed on the more recently developed and highly sensitive immunochemical and immunobiological methods, because biological and immunological changes occur long before any anthropometric abnormality can be detected. However, the facilities for carrying out these measurements may not be generally available in Nigeria, the country from which examples are taken. (DP-E)

6929 **Omer, A.H.** *Oxamniquine for treating* Schistosoma mansoni *infection in Sudan.* British Medical Journal (London), 2(6131), 15 Jul 1978, 163-165. Engl. 17 refs.

The efficacy and acceptability of oral oxamniquine was assessed in Sudanese patients infected with *Schistosoma mansoni*. Cure rates, determined by the absence of viable eggs in the stools 6 months after treatment, were 94.9% in patients treated treated with a total of 60 mg:kg, 78.8% in those treated with 40 mg:kg, and 68.9% in those treated with 30 mg:kg. Side effects of the drug were minimal. Though 60 mg was by far the most effective dose, egg counts were significantly reduced even in patients not cured. Statistical data are included. (Modified journal abstract)

6930 **Onubogu, U.V.** *Intestinal parasites of school children in urban and rural areas of eastern Nigeria/Darmparasiten bei Schulkindern in städtischen und ländlichen Bereichen Ost-Nigerias.* Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene (Stuttgart, Germany FR), 242(1), 1978, 121-131. Engl.

There is a German summary and figures are labelled in both English and German.

A survey of intestinal parasitism in urban and rural schoolchildren in the Anambra and Imo states of Nigeria was undertaken from October 1975-March 1976. Of 1 742 children screened for helminths and 1 699 examined for protozoan infections, 81% and 55% were found to carry one or more species, respectively. Helminth infections, especially hookworm, were higher in rural children, while protozoan infections were higher in urban children. Further analysis of the survey findings are presented in this paper and food hawking is pointed out as an outstanding factor in promoting infections and reinfections, especially in urban children. Statistical data are included. (HC-L)

6931 **Oomen, H.A., Jansen, A.A., T Mannetje, W.** *Machakos Project studies; agents affecting health of mother and child in a rural area of Kenya; XIV: growth pattern of rural Akamba pre-school children.* Tropical and Geographical Medicine (Haarlem, Netherlands), 31(3), Sep 1979, 421-439. Engl. Refs.

This paper presents weight and height data collected on 568 children aged 0-5 years in rural Kenya. During the 1st 6 months, growth closely follows the Harvard standards, but this is succeeded by a sharp drop that persists until the 6th year. About 75% of babies aged 1-6 months are above the weight-for-height standard. This decreases to 54% after 6 months and continues to decrease to about 30% by the age of 5. The authors conclude that a child whose weight is 70% of the standard should be considered at risk. This covers about 3% of the children aged less than 1 year in this area and 5%-6% of those aged 1-5 years. Statistical data are included. (FM)

6932 **Osuntokun, B.O.** *Stroke in the Africans.* African Journal of Medical Sciences (Oxford, UK), 6(2), 1977, 39-53. Engl. Refs.

Stroke is becoming a major cause of death and morbidity in African populations, which frequently also have a high incidence of hypertension. The epidemiology of stroke in Africans is reviewed and the results of the 1st community study over a 2-year period on the incidence of stroke in an urban African community (Ibadan) are presented. The male:female ratio was 5:1. Incidence rates reached peaks in the 8th decade in males and in the 7th decade in females, were higher in males in all age groups, and are comparable with those in European populations, except in those under the age of 40 in Ibadan, in which age-specific incidence rates are considerably lower than in European and Japanese populations. Hypertension and diabetes mellitus constituted the main risk factors. (Modified journal abstract)

6933 **Owor, R., Madda, J.P.** *Schistosomiasis causing tumor-like lesions.* East African Medical Journal (Nairobi), 54(4), Mar 1977, 137-141. Engl.

There is a high incidence of *Schistosoma mansoni* infection in the West Nile region of Uganda. The usual presentation is with colitis or portal hypertension, but the authors draw attention to the frequent occurrence of abdominal tumours or masses often mistaken for neoplastic growths. A review of hospital records from 1971-1975 revealed 28 cases (74% from the West Nile region) in which a tumour was due to schistosomiasis. Of these 28 cases, 14 were abdominal tumours, 5 patients had intestinal obstruction, there was one case each of urinary obstruction and granulation of the head of the pancreas, and other diagnoses ranged from appendicitis to tubal-ovarian mass. (DP-E)

6934 **Pak, N., Araya, H., Cooper, D., Luengo, N., Mateluna, A.** *Valor nutritivo de la dieta, proporcionada por la Junta Nacional de Jardines Infantiles (JUNJI), a los jardines infantiles del Area Norte de Santiago. (Nutritive value of the diet supplied by the national kindergarten board to kindergartens in north Santiago district).* Pediatría (Santiago), 19(1), 1976, 35-40. Span. 10 refs.

The nutritive value of the diet supplied by Chile's national kindergarten board has been evaluated both in theory and in practice, the latter by means of laboratory analysis of meals served in 11 kindergartens in north Santiago district. In comparison with FAO standard requirements for the various age groups (2-5 years), the diet was found to be protein excessive (16%-26% of total calories, as opposed to the recommended 11%) and calorie deficient, particularly for the 5-year-olds. Data from the study are set forward in eight tables and details of the methodology are provided. (HC-L)

6935 **Palomino, H., Mueller, W.H., Schull, W.J.** *Altitude, heredity and body proportions in northern Chile.* American Journal of Physical Anthropology (Philadelphia, Pa.), 50(1), Jan 1979, 39-50. Engl. Refs.

This paper explores changes with altitude and ethnicity (Spanish/Aymara ancestry) in body proportions of permanent residents of an altitudinal gradient (0-4 000 m) in northern Chile. Anthropometric indices and 14 bone measurements were used to assess body shape. Ethnicity independent of altitude had most effect on proportions and less on size, while altitude affected head and chest proportions during growth. On the whole, the effects of altitude and Aymara ancestry were independent, in spite of a correlation of ethnicity and altitude in Andean populations. Statistical data are included. (DP-E)

6936 **Pampiglione, S., Marton, K.** *Leishmaniose cutanée en République de Guinée. (Leishmaniasis in the Republic of Guinea).* Médecine d'Afrique Noire (Paris), 25(7), Jul 1978, 433-436. Fren. 15 refs.

A leishmaniasis survey, based on a skin sensitivity test, was conducted in the four natural zones of Guinea: a maritime region, a central mountainous area, a high plateau, and a forest zone. An overall positive rate of 14.7% was found. No history of any illness resembling *kala azar* or cutaneous leishmaniasis could be obtained and the findings are consistent with other studies in neighbouring Mali. The absence of such records is probably due to the lack of laboratories, since three cases of oriental sore have been diagnosed in the past 3 years in a laboratory established by a bauxite mine. A case of cutaneous leishmaniasis from Conakry is described. (Modified journal abstract)

6937 **Parikh, S.D., El-Ghamrawi, K.A.** *Cancer of the naso-pharynx in Kuwait.* Journal of Laryngology and Otology (London), 92(8), Aug 1978, 681-691. Engl. Refs.

A clinicopathological study of 143 cases of cancer of the nasopharynx from 1963-1974 is presented. The entire population of Kuwait is covered, as well as a small number of nomads. Cancer of the nasopharynx is the commonest of all head and neck cancers (18.3%) and comprises 4.2% of all malignancies. The male:female ratio is 2.9:1. Cervical lymphadenopathy (83%) was the commonest presenting symptom. The most common histological findings were undifferentiated carcinoma and squamous cell carcinoma (28% each). Hypotheses of the aetiology are reviewed. Statistical data are included. (Modified journal abstract)

6938 **Partono, F., Purnomo, Pribadi, W., Soewarta, A.** *Epidemiological and clinical features of* Brugia timori *in a newly established village, Karakuak, East Flores, Indonesia.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 27(5), Sep 1978, 910-913. Engl.

The epidemiological and clinical features of *Brugia timori* filariasis in a newly established village, Karakuak (Indonesia), is described. The microfilarial rates by finger stick and nuclepore filtration were 24% and 30%, respectively, and the disease rate 64%. Infected persons were found in every family and household with no predominant age or sex preference. Development of elephantiasis in the population was associated with residence in the new village of Karakuak, where extensive rice field cultivation was initiated soon after arrival. The irrigated field provided excellent breeding sites for the vector, *Anopheles barbirostris*. People with no previous exposure to the parasite developed elephantiasis earlier and more frequently than those originating from other endemic areas. Statistical data are included. (Modified journal abstract)

6939 **Patri M., A., Sepulveda B., H., Valenzuela Y., C.** *Estudio del crecimiento y desarrollo del niño de edad preescolar (1 a 6 años de edad) del Area Metropolitana Norte de Santiago; seguimiento longitudinal; I parte: generalidades. (Growth and development of preschool children* *(aged 1-6 years) in north Santiago district; longitudinal study; part 1: general information).* Pediatría (Santiago), 19(1), 1976, 27-30. Span.

Lack of national standards for child growth and development prompted a multidisciplinary team from the *Centro de Nutrición, Crecimiento, y Desarrollo,* part of the pediatric department at the University of Chile, to undertake a longitudinal study of preschool (aged 0-6 years) and school-age children (aged 6-17 years) in north Santiago district. This report, which is restricted to the 1st group, describes the study sample (size, selection criteria, etc.); the general characteristics of the children and their parents; their socioeconomic and nutritional circumstances; the study methodology, including the techniques, equipment, and procedures used; and the preliminary findings. (HC-L)

6940 **Philippon, B., le Berre, R.** *Lutte contre les vecteurs d'onchocercose humaine en Afrique intertropicale. (Control of vectors of human onchocerciasis in intertropical Africa).* Médecine Tropicale (Marseilles, France), 38(6), Nov-Dec 1978, 667-675. Fren. 35 refs.

The authors outline the ecological, biological, genetic, and chemical means of controlling onchocerciasis vectors in Africa. They then examine the methodology of chemical larviciding, which is the only kind of large scale control presently used. They describe the methods, results, and problems of the Onchocerciasis Control Programme in the Volta River basin, a model for present and future control measures. They emphasize the excellent level of control of the vector and of onchocerciasis transmission that has been obtained and expect further large scale campaigns to be initiated. (Modified journal abstract)

6941 **Pieters, J.J., de Moel, J.P., van Steenbergen, W.M., van der Hoeven, W.J.** *Effect of school-feeding on growth of children in Kirinyaga district, Kenya.* East African Medical Journal (Nairobi), 54(11), Nov 1977, 621-630. Engl. 19 refs.

The effect of school feeding on the nutritional status and/or growth of Kenyan schoolchildren was measured in a comparative study of experimental and control groups similar in terms of nutrition at home and level of living. Six months of school feeding had hardly any effect on body size but 1 year of the programme evidenced significant, albeit modest, differences in growth. This paper outlines the study materials and methods and summarizes its findings, which have been described in detail in several reports. Statistical data are included. (HC-L)

6942 **Plank, S.J.** *Family allowance and family planning in Chile.* American Journal of Public Health (New York), 68(10), Oct 1978, 989-994. Engl. 13 refs.

Family allowances designed to promote maternal and child health and welfare could be self-defeating if they stimulated otherwise unwanted births, as is often assumed. An attempt to test this assumption was made in Chile in 1960-1970 through interviews with 945 wives receiving an allowance and 690 non-recipients. Recipients practiced contraception significantly more than did non-recipients. This was not explained by wives' educational attainment or employment, the couples' earnings, or number of living children, but was associated with a 50% greater utilization of professional prenatal care by recipients during the most recent pregnancy; women with such care (regardless of allowance status) were 75% more likely than others to control their fertility. Statistical data are included. (Modified journal abstract)

6943 **Prema, K.** *Pregnancy and lactation; some nutritional aspects.* Indian Journal of Medical Research (New Delhi), 68(10), Oct 1978, Suppl., 70-79. Engl. 20 refs.

This study of 1 700 pregnant women in Hyderabad, India, shows that the mean birth weight of infants born to mothers from the higher income group was 3.13 kg compared to 2.90 kg in the middle income and 2.70 kg in the lower income group. Factors influencing birth weight are examined and consideration is given to placental function, the prevention of low-birth-weight infants, and trace elements in pregnancy. A number of topics related to lactation, including patterns and duration of breast-feeding and its interaction with fertility, are also discussed. (DP-E)

6944 **Prost, A.** *Situation dans un foyer d'onchocercose du Mali après treize ans de contrôle anti-simulidien; 1: aspects parasitologiques. (Situation in a focus of onchocerciasis in Mali after thirteen years of* Simulium *control; 1: parasitological aspects).* Annales de la Société Belge de Médecine Tropicale (Brussels), 57(6), 1977, 569-575. Fren. 12 refs.
For part 2 see entry 6976.

After 13 years of blackfly control operations, the population in the onchocerciasis focus at Farako, Mali, was examined. Although the blackfly has not been eliminated everywhere, the endemic disease has rapidly regressed in villages near catching stations. The risks of transmission have become smaller as the reservoir of flies has shrunk and the possible source of infection for *Simulium* have become less common. The prevalence of the disease has already been reduced to a level that is no longer a public health problem. The maintenance of satisfactory vector control for 10 years suggests the possibility of onchocerciasis dying out in this type of a focus. (Modified journal abstract)

6945 **Pugh, R.N., Burrows, J.W., Bradley, A.K.** *Malumfashi Endemic Diseases Research Project, XVI; the findings of a survey for schistosomiasis mansoni, hookworm, giardiasis and nu-*

tritional status. Annals of Tropical Medicine and Parasitology (London), 5(3), 1981, 281-292. Engl. 24 refs.

A parasitological stool survey was conducted on a 10% random sample of villagers (429 individuals) living around a recently constructed low earth dam in an area of northern Nigeria. The study revealed a high incidence of low intensity hookworm (40%) and *Giardia lamblia* (18%) infections. An additional parasitological survey and anthropometric study were conducted on preschool children from two villages with abundant and inadequate water supplies, respectively. A greater incidence of wasting and a higher prevalence of giardiasis were discovered among the children from the village with the inadequate water supply, although a causal relationship could not be established. This paper presents and discusses data from both studies and suggests that further research is needed to clarify the importance of giardiasis infection in impaired nutrition status. (HC-L)

6946 **Rajalakshmi, R., Subbulakshmi, G., Parekh, B., Dave, I., Bhatt, R.V.** *Distribution of birth weights in the low and high income groups in urban Baroda and factors influencing the same*. Baroda Journal of Nutrition (Baroda, India), 5, 1978, 47-56. Engl. 42 refs.

Data on the birth weights of 829 low-income- and 81 high-income-group infants in urban Baroda, India, were recorded and analyzed in terms of maternal parity, height, and weight; weight gain during pregnancy; placental weight; and placental protein content. The mean birth weight in the lower- and higher-income groups was 2.6 kg and 2.8 kg, respectively; 10% of the low-income and none of the high-income infants weighed less than 2 kg. Analysis of the other parameters suggests that maternal weight gain, placental weight, and placental protein are interrelated and have a bearing on birth weight. Data are set forward in seven tables and one graph. (HC-L)

6947 **Ramachandran, K., Parmar, B.S., Jain, J.K., Tandon, B.N., Gandhi, P.C.** *Limitations of film strip and bangle test for identification of malnourished children*. American Journal of Clinical Nutrition (Bethesda, Md.), 31(8), Aug 1978, 1469-1472. Engl.

In order to assess the value of the bangle and tricolour tape tests in identifying malnourished children, these methods were used to evaluate the nutrition status of 800 Indian children aged less than 6 years and compared with weight-for-age findings. The bangle test was found to have a false-positive rate of 12.1% and a false-negative rate of 50.2%. The tape test had a false-positive rate of 21.6% and a false-negative rate of 31.9%. Thus, the use of these simple tests to measure mid-arm circumference by village health workers is not recommended. (HC-L)

6948 **Raybould, J.N., White, G.B.** WHO, Geneva. *Distribution, bionomics and control of onchocerciasis vectors (*Diptera: simuliidae*) in eastern Africa and the Yemen*. Geneva, WHO, 1979. 50p. Engl. Refs.

The epidemiology of onchocerciasis in Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Burundi, Somalia, Sudan, Tanzania, Uganda, Yemen, Zaire, and Zambia is reviewed. This WHO report examines the various groups of onchocerciasis vectors including their distribution, life cycles and control feasibility, methods of collection, adult dispersal and biting behaviour, and the effect of deforestation. A number of control measures are evaluated. (DP-E)

6949 **Ridet, J., Selby, P.** *Lutte contre les maladies sexuellement transmises au Sénégal. (Control of sexually transmitted diseases in Senegal)*. Sozial- und Präventivmedizin (Zurich, Switzerland), 24(2-3), May 1979, 148-151. Fren.

Sexually-transmissible diseases (STDs) are an important public health problem in Senegal due to such factors as the weakening of traditional family life, the increase in tourism, ignorance, etc. In 1972, the government standardized treatment protocols and, in 1976, in cooperation with WHO and the Geneva-based Sandoz Institute, launched a service, training, and research project based on pilot centres in three cities. While the three centres have been successful in treating large numbers of cases, they have failed to ensure contact-tracing or to promote a better understanding of STDs. It is hoped that further extension of the project to the peripheral health services, education of basic health staff, and a multidisciplinary approach to the control of STDs will yield better results from a public health point of view. (HC-L)

6950 **Ripert, C., Durand, B., Carrie, J., Riedel, D., Bray-Zoua, D.** *Etude épidémiologique des nématodoses intestinales (ascaridiose, trichocéphalose, nécatorose) dans cinq villages de la vallée de la Sanaga (Cameroun); résultats du traitment de mass des populations par le pamoate de pyrantel. (Epidemiological studies of intestinal nematode infections (ascariasis, trichuriasis, hookworm disease) in five villages of the Sanaga valley (Cameroon); results of the mass treatment of the population with pyrantel embonate)*. Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 71(4-5), 1978, 361-369. Fren. 15 refs.

The inhabitants of five villages in Cameroon were found to have an overall infection rate of 94% with *Ascaris lumbricoides, Trichuis trichuria*, and/or *Necator americanus*. Treatment of 85% of the population of two villages with a single oral dose of 12.5 mg pyrantel embonate:kg and of 90% of the inhabitants of the other three villages with a single dose of 6.2 mg:kg resulted in a reduced incidence of ascariasis from 56%-11% and from 59%-17%, respectively. This compares with a rise in infection rate after the administration of a placebo to the inhabitants of one village. Statistical data are included. (Modified journal abstract)

6951 **Rugemalila, J.B.** *Impact of urinary schistosomiasis on the health of two community populations living in endemic areas in Tanzania.* Tropical and Geographical Medicine (Haarlem, Netherlands), 31(3), Sep 1979, 375-380. Engl. Refs.

An investigation was carried out in two separate areas of Tanzania to study the effects of schistosomiasis infection on community health. Both groups had infection prevalences of 54%-57%, with peaks of 66%-67% among children aged 5-19 years. Over 90% of the infections were symptomatic, showing mostly manifestations of vesical lesions. The prevalence of urological lesions, including the potentially fatal ureterorenal lesions, was higher than hitherto reported from Tanzania. Urinary schistosomiasis was therefore considered to be of more serious public health importance in the country than has been accepted in the past. Statistical data are included. (Modified journal abstract)

6952 **Sack, R.B., Pierce, N.F., Hirschhorn, N.** *Current status of oral therapy in the treatment of acute diarrheal illness.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(12), Dec 1978, 2252-2257. Engl. 38 refs.

Recent major advances in the theory of acute diarrheal disease have resulted in the availability of a simple, inexpensive, oral glucose-electrolyte solution. The solution has been used successfully in a wide variety of diarrheal disorders in nearly all age groups and can almost be called "universal." Although minor refinements in its composition may still be possible, the largest problem at present is in defining its place in the health care delivery system and in devising means to ensure its optimal use by relatively unskilled persons. (Modified journal abstract)

6953 **Sapire, K.E., Levy, S.** *Vasectomy as an outpatient procedure.* South African Medical Journal (Cape Town), 55(1), 6 Jan 1979, 10-12, 14. Engl.

From January 1976-June 1977, 250 men received vasectomies under local anaesthetic on an outpatient basis at the Groot Schuur Hospital, Cape Town, South Africa. This paper details the counselling, preoperative preparation and examination, and operative technique (five photos); describes the complications encountered, all of which were minor and transient; and briefly discusses the socioeconomic characteristics of the men and their reasons for seeking vasectomy. (HC-L)

6954 **Schenone, H., Villarroel, F., Alfaro, E.** *Epidemiología de la enfermedad de Chagas en Chile: condiciones de la vivienda relacionadas con la presencia de* Triatoma infestans *y la proporción de humanos y animales infectados con* Trypanosoma cruzi. *(Epidemiology of Chagas's disease in Chile: housing conditions related to the presence of* Triatoma infestans *and the proportion of humans and animals infected by* Trypanosoma cruzi. Boletín Chileno de Parasitología (Santiago), 33(1-2), 1978, 2-7. Span. 11 refs.

An investigation into Chagas' disease was carried out in 1 820 households in endemic areas of Chile from 1948-1971. The investigation involved classification of the houses according to their building materials and conditions, a search for *Triatoma infestans* specimens and the testing of same for *Trypanosoma cruzi*, and examination, by xenodiagnosis, of the human and mammal inhabitants of all households for *T. cruzi* infection. Analysis of the results revealed that bug infestations tended to be associated with primitive housing materials and poor ventilation and that *T. cruzi* infection rates for people, dogs, and cats were highest in houses with infected bugs. This paper describes the study methodology and presents and discusses its results. (HC-L)

6955 **Scragg, J.N., Rubidge, C.J.** *Patterns of disease in black and Indian children in Natal.* South African Medical Journal (Cape Town), 54(7), 12 Aug 1978, 265-270. Engl.

This statistical study of 92 000 Asian and African children admitted to the 234-bed pediatric unit of a Durban (South Africa) hospital over a 16-year period emphasizes the prevalence of preventable diseases, due mainly to infection and malnutrition, among this population. Overall mortality was 21%. The main reasons for admission were respiratory disorders (21%), alimentary tract disorders (13%), infectious fevers (10%), tuberculosis (7%), and neonatal disorders (6%); most of the children also had intestinal helminths. Statistical data are included. (DP-E)

6956 **Sembiring, L., Napitupulu, L., Manoeroeng, S.M.** *Heights and weights of preschool children visiting the MCH clinic of the General Hospital (RSUPP), Medan.* Paediatrica Indonesiana (Jakarta), 18, May-Jun 1978, 151-157. Engl. 8 refs.

Second Asian Congress of Pediatrics, Jakarta, Indonesia, 3-6 Aug 1976.

The average weight and height of 4 082 children visiting the General Hospital (RSUPP) at Medan, Indonesia, from 1969-1974 were found to be higher than those reported in a similar 1939 study and lower than those reported in 1973 for childrean aged 5-6 years. These findings are compared to the USA's Harvard standards. Copious statistical data are included. (DP-E)

6957 **Shah, P.M.** *Developmental factors—social, economic and cultural.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 16(3), Mar 1979, 69-74. Engl. 12 refs.

In a study of children in 23 Indian villages, it was observed that the status of the majority of malnourished children deteriorated most seriously in the 2nd year of life due to the cessation of breast-feeding combined with the failure to introduce semi-solid foods at the proper time. This article also examines some other factors that contribute to malnutrition, such as diluted supplementary foods and bottle-feeding, family size and spacing, parental socioeconomic status and employment, sex of the child, etc. Statistical data are included. (DP-E)

6958 **Shah, P.M., Corra, D.** *Kasa MCHN Project: integrated mother-child health-nutrition model; second progress report; April 1975-March 1976*. Maharashtra, India, CARE-Maharashtra, 1976. 123p. Engl.
Unpublished document; see also entry 6748.

A pilot maternal child health project underway at the primary health centre in Kasa, India, provides an integrated programme of surveillance of preschool children and pregnant and nursing women, supplemental feeding of malnourished children, basic health care, and health and nutrition education. Local, part-time social workers with little education are the key component of the programme, supplementing the work of the health centre staff. The 2nd progress report describes personnel utilization, health care and nutrition programmes implemented, the information system used to evaluate progress, other activities such as family planning and health and nutrition education, and research done on the impact of project programmes on birthrate and health status. (FM)

6959 **Shamebo, D.** *Fertility and infant mortality rates in Dembia Plain, Gondar*. Ethiopian Medical Journal (Addis Ababa), 16(3), Jul 1978, 95-97. Engl.

A 12-month study was carried out in three towns of Gondar administrative region (Ethiopia) to gather information on births and deaths. Local families were visited every 3 months and data on pregnancy, births, and infant deaths were noted. Figures collected showed a crude birthrate of 35:1 000 population and an infant mortality of 202:1 000 live births. These correspond quite well with more careful surveys in similar parts of Ethiopia. While this study was useful, the best way of recording birth and death rates on a continuous basis remains undetermined. Two tables of statistical data are included. (Modified journal abstract)

6960 **Sharma, D.B., Lahori, U.C., Gupta, R.C.** *Immunization status of infants and preschool children belonging to urban and rural areas of Jammu (Kashmir)*. Indian Pediatrics (Calcutta, India), 14(6), Jun 1977, 443-448. Engl.

A survey of 1 200 urban and 1 000 rural Indian mothers revealed the following about the immunization status of the youngest member of each family: among urban and rural children, 82% and 73% had received smallpox vaccinations, 14% and 5% BCG, 15% and 5% DPT, and 25% and 18% poliomyelitis, respectively. However, most vaccination series had not been completed. The status of immunization is studied in relation to sex, socioeconomic status, maternal education, family structure, and birth order of the child. Reasons given by mothers for non-immunization are considered with regard to available facilities. Statistical data are included. (Modified journal abstract)

6961 **Sinclair, H.M., Howat, G.R.** *World nutrition and nutrition education*. Oxford, UK, Oxford University Press, 1980. 226p. Engl. Refs.

This book contains papers presented in September 1977 at the Oxford Conference on Nutrition Education. Section 1 deals with the nutritional background of the individual, the family, and the community and problems in developing countries and with changing societies, while section 2 concerns educational background, covering topics such as food and nutrition education and training, curriculum design for nutrition education, audiovisual techniques, instituting change in nutrition education, and the impact of malnutrition on the learning situation. Chapter 3 relates to nutrition education in practice and the conference is reviewed in chapter 4. (AF)

6962 **Singh, K.P., Gulati, P.V.** *Status of B.C.G. vaccination in children under five years of age in a rural area—a scar survey*. Indian Pediatrics (Calcutta, India), 13(9), Sep 1976, 683-686. Engl. 8 refs.

A survey of 2 343 rural Indian children aged less than 5 years revealed that 41.5% of these children had scars indicating that they had received BCG vaccinations. Only 30.5% of the children aged less than 1 year had been vaccinated, but coverage increased with age and the child's birth order. There was no difference in the vaccination status of male and female children, while 46.3% of Christian children were vaccinated as compared to 36.4% of the Hindu children. It is suggested that local primary care health workers conduct periodic surveys to identify unvaccinated children and bring them to the attention of the health authorities. Statistical data are included. (DP-E)

6963 **Saud, R.E., Anzorena, O., Egea, E.H., Penna, E.H., Silva, H.T.** *Atención médica y condiciones socio-económicas asociadas a la mortalidad infantil. (Medical care and socioeconomic conditions associated with infant mortality)*. Revista Argentina de Tuberculosis y Enfermedades Pulmonares (Buenos Aires), 39(3), 1978, 57-73. Span. 9 refs.

In Lomas de Zamora, an area of Buenos Aires (Argentina) that is composed mainly of migrants, 268 infant death certificates issued during a 1-year period were examined and additional information regarding the infants—age, cause, and place of death; father's occupation; mother's marital status; etc.—was gathered. Late, preventable death occurring at home in the child of a labourer and a death certificate issued by a physician other than a patient's doctor were taken as indicators of low socioeconomic level, lack of social security, and poor access to medical services. This paper analyzes and presents in 21 tables the study findings. (HC-L)

6964 **Sogbanmu, M.O.** *Perinatal mortality and maternal mortality in General Hospital, Ondo, Nigeria; use of high-risk pregnancy predictive scoring index.* Nigerian Medical Journal (Ikeja, Nigeria), 9(1), Jan 1979, 123-127. Engl. 8 refs.

A simple index for screening high-risk pregnancies was introduced in the obstetrical unit of a rural hospital in Nigeria; in spite of this, perinatal and maternal death rates continued to be high, at 52.3 and 7.2:1 000, respectively, for the year 1973. This paper describes the population served, the scoring index, the procedure for managing high-risk pregnancies, and the outcome of these pregnancies. Electricity cuts, gasoline shortages, and poverty were implicated along with the usual factors contributing to high-risk pregnancies in this large loss of life. (HC-L)

6965 **Solon, F., Fernández, T.L., Latham, M.C., Popkin, B.M.** *Evaluation of strategies to control vitamin A deficiency in the Philippines.* American Journal of Clinical Nutrition (Bethesda, Md.), 32(7), Jul 1979, 1445-1453. Engl. 14 refs.

Xerophthalmia has been found to be an important cause of blindness in the Philippines. An earlier study had investigated its prevalence and epidemiology on the island of Cebu. The research now presented consists of an evaluation of the relative effectiveness of three different intervention strategies to control vitamin A deficiency in Cebu. These interventions were 1) a public health and horticulture intervention, 2) the provision of 200 000 IU of vitamin A to children every 6 months (the "capsule intervention"), and 3) the fortification of monosodium glutamate with vitamin A. A total of 12 areas or *barangays* were included. Each intervention was monitored in four different *barangays*, two urban and two rural, for almost 2 years. Similar examinations were performed before and after the interventions. The monosodium glutamate fortification was the only intervention that resulted both in a significant reduction in clinical signs of xerophthalmia and in a significant rise in serum vitamin A levels. Fortification is now being planned in three Philippine provinces. (Modified journal abstract)

6966 **Srivastava, A.K., Agarwal, V.K., Gupta, S.K., Mehrotra, S.N.** *Longitudinal study of physical growth and morbidity pattern of small for date babies from birth to six months of age.* Indian Journal of Pediatrics (Calcutta, India), 45(360), Jan 1978, 1-10. Engl. Refs.

Fifty light-for-dates and 50 full-term Indian babies were studied longitudinally for 6 months to determine their growth and morbidity patterns. In comparison, the light-for-dates group remained small in all four physical parameters of growth (weight, length, and head and chest circumference) during the 1st 6 months of life and they also had a higher frequency and longer duration of illness. The most common illnesses reported in both groups were respiratory and gastrointestinal infections followed by eye, umbilical, and skin infections. Statistical data are included. (Modified journal abstract)

6967 **Subash Babu, D., Chuttani, C.S.** *Indices of nutritional status derived from body weight and height among school children.* Indian Journal of Pediatrics (Calcutta, India), 45(368), Sep 1978, 289-293. Engl.

Anthropometric measurements of 1 673 Indian schoolchildren aged 6-15 years were carried out to evaluate the accuracy of three indices: weight:height, weight:height^2 x 100, and weight:height^3 x 1 000. The results are discussed and presented as statistical data. It is concluded that weight:height^2 x 100 can be an age-independent index for assessing nutritional status. (DP-E)

6968 **Sun, T.H., Lin, H.S., Freedman, R.** *Trends in fertility, family size preferences, and family planning practice: Taiwan, 1961-76.* Studies in Family Planning (New York), 9(4), 1978, 54-70. Engl. Refs.

A series of six sample surveys and vital statistics are used to analyze major reproductive trends for 1961-1976 in Taiwan. Fertility fell rapidly from 1961-1970 as a result of the adoption of contraception and rising age of marriage, while there was little change in preferred family size. From 1970-1976, the practice of contraception reached high levels in all social strata and preferred family size and fertility both declined rapidly. Practice of contraception for spacing births increased considerably after 1970. These changes occurred while many traditional family values, including strong son preference, persisted. A continuation of the decline in fertility is predicted. (Modified journal abstract)

6969 **Sundaram, V.M., Sankaranarayanan, V.S., Rajendran, S., Varalakshmi, Sarasa** *Health profile of school children in Madras City.* Indian Pediatrics (Calcutta, India), 15(9), Sep 1978, 725-730. Engl.

A survey of school health and school premises was undertaken in primary and secondary corporation and private-aided schools in Madras City, India. Among the 15 535 children examined, common health problems identified included 2nd- and 3rd-degree malnutrition, vitamin A and B complex deficiencies, ascariasis, dental caries, and respiratory infections. Examination of school conditions revealed that 40%-47% of the schools had inadequate space for classes, 75% had inadequate space for playgrounds, 62% lacked a protected water supply, 55%-63% lacked serviceable latrines, and 75% had, in their vicinity, vendors selling contaminated food. A school health programme combining healthful school living, school health clinics, and health education is called for. Statistical data are included. (HC-L)

6970 **Taha, S.A.** *Prevalence and severity of protein-calorie malnutrition in Sudanese children.* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(5), Oct 1978, 203-206. Engl. 26 refs.

In a relatively prosperous farming community in the Sudan, anthropometric measurements for 1 291 children aged 6 months-4 years were recorded. Weight, height, mid-arm circumference, and triceps skinfold thickness showed a tendency to drop below Caucasian standards at about the age of 6 months. Only 47% of the children were well-nourished; of the remainder, 1% had severe, 17% moderate, and 35% mild protein-calorie malnutrition. It is concluded that malnutrition is a grave pediatric problem in the Sudan and the author suggests that a standardized method of assessing it—preferably mid-arm circumference—be adopted for quick and accurate nation-wide data collection. (HC-L)

6971 **Talwar, P., Sehgal, S.C.** *Mycotic infections of the eye in Chandigarh and neighbouring areas.* Indian Journal of Medical Research (New Delhi), 67(6), Jun 1978, 929-933. Engl. 11 refs.

Data are presented on the prevalence of fungi in patients with eye infections in Chandigarh, India, from 1971-1976. Fungi were seen on direct microscopy in 13 samples submitted for mycological examination and isolated in culture from an additional 20 patients. Most microscopically positive specimens (10 of 13) were from corneal ulcers: *Aspergillus* was the most common species isolated. Male patients outnumbered females by 2:1. A history of trauma was recorded for about 30% of cases and prior use of antibiotics or corticosteroids in about 60%. Statistical data are included. (Modified journal abstract)

6972 **Tekce, B.** *Yozgat (Turkey) Maternal and Child Health and Family Planning Project: baseline information on socioeconomic and demographic conditions.* Cairo, Population Council, West Asia and North African Regional Office, Regional Papers, Jul 1979. 129p. Engl. Refs.

This report presents baseline data on demographic, socioeconomic, and health conditions in Yozgat, Turkey, that were used to evaluate a maternal child health project. Following an introductory chapter, chapter 2 reviews the history of settlement and population growth in the area. Chapter 3 examines employment patterns in urban and rural areas. Chapter 4 presents information on the population structure, including age, sex, and education. Factors affecting fertility, such as marriage patterns, contraception, abortion, and lactational infecundity are described in chapter 5. The final chapter examines mortality patterns according to age, sex, and urban/rural distribution. Demographic statistical data are included in several appendices. (FM)

6973 **Teklehaimanot, R., Goll, P.H.** *Investigations into the control of schistosomiasis at the Hva Wonji-Shoa sugar estates in Ethiopia; 2: interim evaluation of the project.* Ethiopian Medical Journal (Addis Ababa), 16(3), Jul 1978, 115-127. Engl. 17 refs.

An account is given of an attempt to control *Schistosoma mansoni* by the use of molluscicides on a sugar estate in Ethiopia. Annual fluctuations of populations of snails (*Biomphalaria pferfferi*) and their distribution in various habitat types are discussed in relation to the application of the molluscicides N-tritylmorpholine and niclosamide. The use of these products in their respective situations was successful in controlling snail populations, but results of a 10% random stool survey of 14 plantation villages indicated that a low level of transmission persists. The most likely modes of transmission are considered and improvements in the application of the control methods are suggested. Clinical aspects of the infection are discussed briefly, but there is little evidence of severe symptoms in this locality. Statistical data are included. (Modified journal abstract)

6974 **Thaung, U., Naung, T., Saw Khine, K., Khai Ming, C.** *Epidemiological features of skin diphtheria infection in Rangoon, Burma.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 9(1), Mar 1978, 4-10. Engl.

A 1971 survey for skin diphtheria carried out on 493 patients with skin lesions who were attending a venereal diseases and dermatology clinic in Rangoon, Burma, revealed that 63.8% had *Corynebacterium diphtheriae* in their skin lesions. All ages and both sexes were equally affected. Skin lesions yielding *C. diphtheriae* on culture were indistinguishable from those associated with other bacteria and 75% of those yielding toxigenic strains were found among children aged less than 5 years. The presence of skin diphtheria may contribute to the high immunity of Burmese children to other forms of the disease. Statistical data are included. (DP-E)

6975 **Thomson, Z.** *Estudo da prâtica do aleitamento materno em um grupo populacional, Londrina, Pr. (Study of breast-feeding in Londrina, Parana, Brazil).* Jornal de Pediatria (Rio de Janeiro, Brazil), 45(6), Dec 1978, 379-385. Portuguese. 41 refs.

A survey of 704 mothers of children aged less than 2 years in Londrina state, Brazil, revealed that only 30.8% of the infants were being fed exclusively on human milk at age 6 months, that 43.6% had already received artificial milk by age 1 month, and that

42.1% were weaned or had never been breast-fed by age 1 month. Longer duration of breast-feeding tended to be associated with rural background, lower income, illiteracy, home birth, and instruction in feeding technique by a non medical person. Statistical data are included. (HC-L)

6976 **Thylefors, B., Rolland, A.** *Situation dans un foyer d'onchocercose du Mali après treize ans de contrôle anti-simulidien; 2: aspects oculaires. (Situation in a focus of onchocerciasis in Mali after 13 years of* Simulium *control; 2: ocular aspects).* Annales de la Société Belge de Médecine Tropicale (Brussels), 57(6), 1977, 577-582. Fren.
For part 1 see entry 6944.

As a result of an anti-*Simulium* campaign conducted in the onchocerciasis focus of Farako, Mali, the vector of the disease has been controlled although not eradicated. Parasitological and ophthalmological examinations carried out in 1968, 1971, and 1976 in a village of this focus have nevertheless revealed an important drop in the prevalence of onchocerciasis and of microfilariae of *Onchocerca volvulus* in the eye and, consequently, the risk of blindness has been reduced to a large extent. On the basis of such a limited survey, however, it is difficult to demonstrate the influence of the vector control campaign on the prevalence of serious onchocercal eye lesions. Statistical data are included. (Modified journal abstract)

6977 **Tursz, A., Rumeau-Rouquette, C., Languillat, G.** *Enquète sur l'ètiologie de l'hypofècondité au Gabon oriental; II: rèsultats en fonction du lieu d'habitat et de l'ethnie. (Etiological study of low fertility in eastern Gabon; II: results according to geographical distribution and ethnic group).* Revue d'Epidémiologie, Médecine Sociale et Santé Publique (Paris), 26(3), 1978, 259-271. Fren. 18 refs.

This article examines the geographical distribution of factors relating to low fertility among 875 men and 673 women in eastern Gabon. Among men, hydroceles and epididymis lesions are more frequent in Ogooue-Lolo, in small villages, and in forest areas. Microfilariae *Loaloa* and *D. perstans* have the same distribution. In both regions studied and whatever the type of residence (town or village), epididymis lesions are more frequent in non-fertile men. Microfilariae are linked with genital lesions and are more seldom found in men who are the fathers of more than two children. Among women, leukorrheas, pelvic pains, and adnexal masses are related to low fertility regardless of place of residence. Statistical data are included. (Modified journal abstract)

6978 **Udani, P.M., Bhat, U.S., Shah, B.P.** *Mental development in severe protein calorie malnutrition (a study of 252 children and 25 mothers).* Indian Pediatrics (Calcutta, India), 13(7), Jul 1976, 507-516. Engl. 18 refs.

The authors studied a total of 252 Indian children (60 controls from the lower socioeconomic classes, 136 malnourished hospital patients, 34 children with kwashiorkor, and 22 of the latters' siblings) in order to assess the effect of malnutrition on mental development. They concluded that, during the stage of active malnutrition, the children had both low IQs (intelligence quotients) and AQs (adaptive quotients); the IQ remained significantly low even though there was marked improvement in the children's behaviour during recovery. The higher IQs observed in the sibling group in identical surroundings also show the influence of nutrition, while low maternal IQ may have an adverse effect on all offspring. Statistical data are included. (DP-E)

6979 **Untario, S., Juwana, M.T., Netty, R.H., Permono, B., Harsono, N.** *Prevalence of iron deficiency anaemia among Indonesian children.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(3), Sep 1978, 337-342. Engl. Refs.

A survey of the prevalence of iron deficiency anaemia was carried out among 1 160 pediatric outpatients of the general hospital in Surabaya, Indonesia. Criteria for anaemia were haemoglobin concentrations of less than 10 g% in children aged 6 months-2 years (group 1), 11 g% in those aged 2-5 years (group 2), and 12 g% in those aged 5-12 years (group 3). Criteria for iron deficiency were serum tranferrin saturation of less than 16% and a bone marrow devoid of iron. In group 1, 12.8% had iron deficiency anaemia; in group 2, 10.7%; and in group 3, 7.6%. The overall prevalence of anaemia was 14.2% and, of iron deficiency anaemia, 9.8%. Statistical data are included. (Modified journal abstract)

6980 **Valenzuela H., P., Yáñez V., A., Rojas S., L., Grinspun S., M.** *Anàlisis de las notificaciones por tuberculosis en Chile, 1971-1975. (Notification of cases of tuberculosis in Chile, 1971-1975).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 85(8), Aug 1978, 128-136. Span.

Mandatory notification of tuberculosis has been in effect in Chile since 1971. An analysis of notification rates for the years 1971-1975 revealed: that the number of new cases diminished at the rate of 3% per year, principally due to a decline of the disease in children and in those aged less than 25 years; that the relative percentage of relapsed cases fell from 13.5% in 1971-1972 to 12.5% in the following years; and that the disease is most frequent in males aged more than 45 years. Six tables of data are presented and sample notification forms are included. (HC-L)

6981 **Velarde, N.** *Nutritionally adequate multimixes for use as home prepared weaning foods in the Altiplano area of South America.* Naringsforskning (Gotebord, Sweden), 21(4), 1977, 314. Engl.

This paper tabulates and discusses the formula and nutrient adequacy of five multimix weaning foods made from products that are readily available, easily prepared, and socially acceptable on the South American *altiplano*. The ingredients used, all of which are grown by the Quechua and Aymara tribes who inhabit the area, are maize, barley, wheat, potato, *quinua*, and *vicia faba*. (HC-L)

6982 **Viset, J.** *Lèpre dans l'Empire Centrafricain. (Leprosy in the Central African Empire).* Afrique Médicale (Dakar), 16(151), 1977, 365-367. Fren.

This paper briefly reviews the epidemiology of leprosy in the Central African Empire and the work and progress of control efforts from 1953 up to the present. It is noted that the incidence of the disease decreased rapidly from 1958-1966, to remain practically stationary for the next 10 years, with children comprising 15.68% of the new cases. This means that the disease, while contained, is far from being eliminated. Some suggestions for identifying and treating active carriers of leprosy in a more concerted manner are put forward. Statistical data are included. (HC-L)

6983 **Visesbakul, D., Tanoompeck, P.** *Growth rate, the feeding practices, and the dietary intake of Thai infants under 2 years-old in central Bangkok*. Journal of the Medical Association of Thailand (Bangkok), 59(6), Jun 1976, 257-263. Engl. 10 refs.

Fifty infants aged 6-24 months were randomly selected from the outpatient department of the Children's Hospital, Bangkok, Thailand. Data regarding their socioeconomic status, feeding practices, anthropometric measurements, and illnesses were gathered. The infant's mean values for weight and head circumference at age 6 months were comparable to the 50th percentile of the North American standard but declined to the 3rd percentile thereafter. Breast-fed infants performed better than those fed powdered or sweetened condensed milk, breast milk alone providing a satisfactory growth rate up to age 1 year. Study data are presented in four tables and five graphs and some suggestions for combatting protein-calorie malnutrition are put forward. (HC-L)

6984 **Visweswara Rao, K.** *Validity of some clinical signs as early indicators of protein calorie malnutrition in preschool children.* Indian Journal of Medical Research (New Delhi), 67(5), May 1978, 779-785. Engl. 14 refs.

By studying the nutritional status of some 3 200 children in Hyderabad, India, the author evaluates a range of clinical signs (thin, sparse discoloured hair; moon face and nasolabial dyssebacia; flaky-paint or mosaic dermatosis; and wasting or edema) as indicators of protein-calorie malnutrition in children by comparing them with standard anthropometric measurements. He concludes that, for reliable diagnosis, the child must exhibit two or more of the clinical signs. Statistical data are included. (DP-E)

6985 **Walker, A.R.** *Some thoughts on malnutrition, dietary intervention and amelioration of high death rates in young South African blacks.* South African Medical Journal (Cape Town), 57(17), 26 Apr 1980, 696-700. Engl. 43 refs.

After pointing out that morbidity and mortality from malnutrition are higher among black South African schoolchildren than among their white counterparts, the author examines criteria for nutrition programmes aimed at infants and preschoolers, schoolchildren, and lactating mothers. It is concluded that only dietary intervention in the very young is likely to improve these rates significantly. Further research is urged in the area of non-nutritional factors and comparison of South African and US data indicates that black populations in both countries are severely disadvantaged. (HC-L)

6986 **Weekly Epidemiological Record, Geneva.** *Leprosy/Lèpre.* Weekly Epidemiological Record (Geneva), 54(3), 19 Jan 1979, 17-23. Engl., Fren.

The worldwide distribution of leprosy is given for 1975. Compared to the rates reported in 110 countries in 1968, the incidence has increased 17%, by 835 000 cases. Africa shows a 5% increase, Burma 25%, India 56%, and Indonesia 86%. Tables provide details of the estimated number of cases, numbers registered, patients treated, those released from treatment, and proportions of lepromatous, tuberculosis, and intermediate cases in each country. It is feared that, because of inadequate reporting and registration procedures, only a 3rd of the actual cases have been detected. (Modified journal abstract)

6987 **Weekly Epidemiological Record, Geneva.** *Synopsis of the world malaria situation in 1977/Sommaire de la situation du paludisme dans le monde en 1977.* Weekly Epidemiological Record (Geneva), 54(14), 6 Apr 1979, 105-107. Engl., Fren.

In 1977, 67 million of the 84 million Africans living north of the Sahara and 291 million of the 342 million living south of the Sahara were at risk from malaria. All of North America was malaria free, while 50 million Central Americans and 60 million South Americans were exposed to varying degrees of risk. Statistics are also presented on Asia, Australia, and Oceania. No information was available from the People's Republic of China. (Modified journal abstract)

6988 **Weil, C.** *Morbidity, mortality and diet as indicators of physical and economic adaptation among Bolivian migrants.* Social Science and Medicine (Oxford, UK), 13D(4), Dec 1979, 215-222. Engl. 28 refs.

A study of mortality, food consumption, and nutrition status was undertaken in a community of settlers (population 254) in the Chochabamba Valley, Bolivia. Its purpose was to determine the success, or adaptiveness, of resettlement by small farmers in the humid tropical lowlands. Mortality data for children aged less than 5 years were found to be higher than the national average and nutrition data suggest that, although farmers' living standards have risen in terms of food purchases and protein consumption, children aged 1-4 years do not necessarily get their share. Details of the study methodology and findings and statistical data are included. (HC-L)

6989 **Weinstok, H., Garcés F., J.L., Soto, J.B., Rodriguez R., J.** *Immunodiagnosis of malaria infections by the National Malaria Eradication Service (SNEM) of Costa Rica*. Bulletin of the Pan American Health Organization (Washington, D.C.), 13(3), 1979, 257-263. Engl.

Fourth Latin American Parasitology Conference, Third National Microbiology and Parasitology Conference, and Forty-second National Medical Congress, San José, Costa Rica, 8-11 Dec 1976.

Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 1979.

Indirect immunofluorescence tests were used in Costa Rica to measure the prevalence of specific malaria antibodies in certain population groups in order to confirm that transmission had been interrupted in previously malarious districts or to determine the prevalence of antibodies among populations currently at risk. This paper describes the study populations and testing procedure. Although study findings indicate extremely low antibody levels, suggesting the absence of transmission, additional serologic surveys and parasitologic and serologic follow-up of all cases are needed to confirm the interruption of transmission on a nationwide basis. Statistical data are included. (HC-L)

6990 **Wenlock, R.W.** *Epidemiology of tropical parasitic diseases in rural Zambia and the consequences for public health*. Journal of Tropical Medicine and Hygiene (London), 82(5), May 1979, 90-98. Engl. Refs.

A nutritional and epidemiological survey of a representative sample of rural populations in Zambia was carried out from 1969-1972. Malaria is holendemic in the eastern province and hyperendemic in the Ndola rural area and north west province. Infection rates are much lower elsewhere. Bilharzia is hyperendemic in the southern province and hookworm is endemic in all regions. Malaria is the greatest problem and control programmes in rural areas should be strengthened. Priority should also be given to improving general sanitation to reduce the transmission of hookworm and bilharzia. Statistical data are included. (FM)

6991 **Wenlock, R.W.** *Age variation in prevalence of parasitic diseases in rural communities*. Medical Journal of Zambia (Lusaka), 12(1), 1978, 13-16. Engl. 17 refs.

Data on 7 479 rural Zambians were analyzed to determine whether the incidence of the main parasitic diseases varies with the age of the population. Malaria was found to occur most commonly in young children, affecting 39.1% of those aged less than 5 years and declining thereafter. Bilharzia was not common in younger children but peaked by age 10 years at 19.5%. Hookworm prevalence attained 17.5% by age 1 year, peaked at 57.2% at age 10 years, and stabilized at over 40% in the adult population; a pronounced drop between the ages of 15-25 years is attributed to the wearing of shoes and, possibly, contact with the health services. (HC-L)

6992 **White, S.J., Stone, M.M., Howland, C.** *Genetic factors in leprosy: a study of children in Uganda*. Journal of Hygiene (Cambridge, UK), 80(2), 1978, 205-216. Engl. Refs.

This paper presents the results of a longitudinal study to determine whether genetics play a role in the incidence of leprosy. A group of 20 990 children who were related to or had been in contact with known leprosy patients were graded according to the degree of relationship and contact and examined for leprosy over an 8-year period. On the basis of the data obtained, no evidence of a link between genetics and leprosy could be ascertained. (HC-L)

6993 **Whitehead, R.G., Hutton, M., Muller, E., Rowland, M.G., Prentice, A.M.** *Factors influencing lactation performance in rural Gambian mothers*. Lancet (London), 2(8092), 22 Jul 1978, 178-181. Engl. 12 refs.

Breast milk consumption was estimated in Keneba, a rural Gambian village, where breast-feeding on demand is universally practiced until children are 18 months of age. The mother's long-term capacity for producing breast milk was estimated by the 2nd month of lactation; yield was closely correlated with the infant's birth weight. Other factors significantly influencing lactation were parity, month of lactation, baby's weight for age, season, and maternal diet. The infant's daily intake of milk was limited primarily by the amount delivered by feed and not by the frequency of feeding. (DP-E)

6994 **Wigg, N.R.** *Anthropometry of Western Samoan pre-school children*. New Zealand Medical Journal (Wellington), 87(607), 8 Mar 1978, 172-176. Engl.

Data are presented on the heights and weights of 419 Western Samoan children aged less than 5 years; these anthropometric measurements are then compared to UK standard values. In the 1st 6 months of life, the Samoan mean values approach the UK 97th percentile, but by age 5 years they are slightly below the UK 50th percentile. The author recommends caution in the use of the UK standard values in this context. (Modified journal abstract)

6995 **Wijesinghe, C.P., Dissanayake, S.A., Dissanayake, P.V.** *Survey of psychiatric morbidity in a semi-urban population of Sri Lanka.* Acta Psychiatrica Scandinavica (Copenhagen), 58(5), 1978, 413-444. Engl. Refs.

After social workers screened a Sri Lankan population of 7 653 using a standardized interview, probable psychiatric cases were then examined by a psychiatrist. The sociodemographic characteristics of these cases and the population at large and the frequency and nature of the disorders identified are examined and presented as statistical data. The 6-month period prevalence for all psychiatric disorders was 45.5:1 000, with psychoses amounting to 6.9:1 000 (males 5.5, females 8.4), and neuroses to 25.2:1 000 (males 9.9, females 40.6). The large majority of disorders were chronic and had not received psychiatric treatment. The revelance of these surveys to the provision of psychiatric services in developing countries is discussed. (Modified journal abstract)

6996 **Wilkins, H.A., Scott, A.** *Variation and stability of* Schistosoma haematobium *egg counts: a four-year study of Gambian children.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 72(4), 1978, 397-404. Engl. Refs.

Individual changes of egg counts in a group of Gambian children were observed over a 4-year period by obtaining replicate stool specimens on several successive days. The results of these observations suggest that the worm burdens of some children are in a dynamic but steady state. Among the factors regulating this may be the acquisition of a degree of immunity to superinfection. The results also prompt speculation whether man's immune response may, in some circumstances, affect the egg-laying worms of the established infection. The role of protective immunity in the epidemiology of schistosomiasis appears complex and needs further study. While the findings are compatible with the hypothesis that concomitant immunity occurs in man, they suggest that it is unlikely to be solely responsible for the lower prevalence and intensity of infection in adults. Statistical data are included. (Modified journal abstract)

6997 **Yasoda Devi, M., Geervani, P.** *Acceptability of fortified wheat products.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 16(2), Feb 1979, 49-51. Engl.

In an Indian experiment to test the palatability and acceptability of nutritionally fortified food, wheat flour and maida samples were fortified with 0.1% and 0.2% synthetic lysine and 5%, 7.5%, and 10% groundnut protein isolate. The fortification at the levels tested did not affect the sensory properties of the product. Statistical data are included. (DP-E)

6998 **Yassin, A., Maher, A., Moawad, M.K.** *Otomycosis: a survey in the eastern province of Saudi Arabia.* Journal of Laryngology and Otology (London), 92(10), Oct 1978, 869-876. Engl. 14 refs.

In an area of Saudi Arabia characterized by high humidity and atmospheric pressure, laboratory examinations of cultures taken from 148 suspected cases of otomycosis over a 13-month period yielded 120 positive results and 131 fungal isolates, of which 110 were single infections and 10 were mixed infections of two or more fungi. The most common were *Aspergillus niger* (51.15%), *A. flavus (18.32%), and Penicillium notatum* (5.34%). The patients were of 13 different nationalities, mostly labourers and others of low socioeconomic status, and predominantly male. Statistical data are included. (DP-E)

6999 **Yehya, S.A., Said, A., El-Hawary, M.F., Sakr, R.** *Protein-calorie malnutrition (PCM) in Egypt; infants socio-economic parameters.* Journal of the Egyptian Medical Association (Cairo), 60(3-4), 1977, 217-229. Engl.

A number of socioeconomic and medical parameters in 232 malnourished Egyptian infants are investigated; these include age, sex, weaning age, type of food given to infants prior to and during the disease crisis, diseases affecting the infants prior to the appearance of malnutrition, order of the diseased infants among family siblings, mortality, and rate of growth as judged by teething, walking, and speech. The significance of the findings and their possible correlation with the different varieties of protein-calorie malnutrition are discussed. Statistical data are included. (Modified journal abstract)

7000 **Yunes, J., da Silva Coelho, H., Colli, A.S., Nigro Conceição, J.A.** *Principais características biológicas e sociais do recém-nascido de baixo peso. (Main biological and social characteristics of low-birth-weight infants).* Revista de Saúde Pública (São Paulo, Brazil), 12(3), 1978, 367-387. Portuguese. 24 refs.

All 327 infants born during 1971 at the *Hospital de Clínicas da Universidade de São Paulo* who weighed 2 500 g or less at birth and approximately 10% of those who weighed 2 500 g or more at birth (220) were studied with respect to anthropometric measurements, clinical conditions, quantity and quality of medical attention received, socioeconomic characteristics of parents, age of mother and attitudes of mother toward the health services, ideal family size, etc. This paper presents and analyzes the results of the study. Statistical data are included. (HC-L)

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